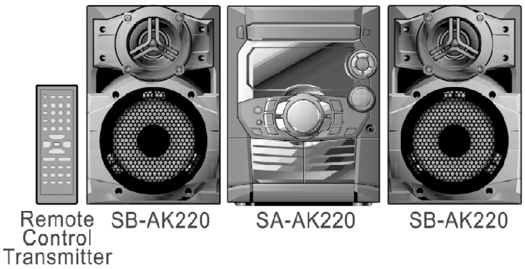
ORDER NO. MD0401034C1
A6

Service Manual

CD Stereo System

SA-AK220P / SA-AK220PC

Colour
(K)... Black Type (For AK220P and AK220PC only)
(S)... Silver Type (For AK220P only)


Remote Control Transmitter
SB-AK220
SA-AK220
SB-AK220

SPECIFICATIONS

Specifications

■ AMPLIFIER SECTION

FTC output power	
THD 10%, both channels driven	
60 Hz - 16 kHz	60 W per channel (6 Ω)
Total FTC power	120 W
RMS output power	
THD 10%, both channels driven	
1 kHz,	80 W per channel (6 Ω)
Total RMS power	160 W
Input sensitivity	
AUX	250 mV
Input Impedance	
AUX	13.3 kΩ

■ FM TUNER SECTION

Frequency range	
	87.9 - 107.9 MHz (200 kHz steps)
	87.5 - 108.0 MHz (100 kHz steps)
Sensitivity	2.5 μV (IHF)
S/N 26 dB	2.2 μV
Antenna terminal(s)	75 Ω (unbalanced)

■ AM TUNER SECTION

Frequency range	520 - 1710 kHz (10 kHz steps)
Sensitivity	
S/N 20 dB (at 1000 kHz)	560 μV/m

■ CASSETTE DECK SECTION

Track system	4 track, 2 channel
Heads	
Record/playback	Solid permalloy head
Erasure	Double gap ferrite head
Motor	DC servo motor
Recording system	AC bias 100 kHz
Erasing system	AC erase 100 kHz
Tape speed	4.8 cm/s (1 7/8 ips)
Overall frequency response (+3 dB, -6 dB at DECK OUT)	
NORMAL (TYPE I)	35 Hz - 14 kHz
S/N	50 dB (A weighted)
Wow and flutter	0.18 % (WRMS)
Fast forward and rewind time	Approx. 120 seconds with C-60 cassette tape

■ CD SECTION

Sampling frequency	44.1 kHz
Decoding	16 bit linear
Beam source/wavelength	Semiconductor laser/780 nm
Number of channels	Stereo
Frequency response	20 Hz - 20 kHz (+1, -2 dB)
Wow and flutter	Below measurable limit
Digital filter	8 fs
D/A converter	MASH (1 bit DAC)

MP3	
Bit rate	**32 kbps - 320 kbps**
Sampling frequency	**32 kHz, 44.1 kHz, 48 kHz**
■ GENERAL	
Power Supply	**AC 120 V, 60Hz**
Power consumption	**165 W**
Power consumption in standby mode	**0.34 W**
Dimensions (W x H x D)	**250 x 330 x 363 mm (9 27/32” x 13” x 14 9/32”)**
Mass	**7.3 kg (16.1lb.)**
■ SYSTEM	
SC-AK220 (P)	**Music center: SA-AK220 (P) Speaker: SB-AK220 (P)**
SC-AK220 (PC)	**Music center: SA-AK220 (PC) Speaker: SB-AK220 (P)**

Notes:

1. Specifications are subject to change without notice. Mass and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.
3. The labels “HIGH” and “LOW” on the rear of the speakers refer to High frequency and Low frequency.

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

1. Safety Precaution

(This “Safety Precaution” is applied only in U.S.A.)

1. **Before servicing, unplug the power cord to prevent an electric shock.**
2. **When replacing parts, use only manufacturer’s recommended components for safety.**
3. **Check the condition of the power cord. Replace if wear or damage is evident.**
4. **After servicing, be sure to restore the lead dress, insulation**

barriers, insulation papers, shields, etc.

5. **Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.**

1.1. Insulation Resistance Test

1. **Unplug the power cord and short the two prongs of the plug with a jumper wire.**
2. **Turn on the power switch.**
3. **Measure the resistance value with ohmmeter between the jumper AC plug and each exposed metal cabinet part, such as screwheads, antenna, control shafts, handle brackets, etc.Measure the resistance value with ohmmeter between the jumper AC plug and each exposed metal cabinet part, such as screwheads, antenna, control shafts, handle brackets, etc. / Equipment with antenna terminals should read between 2.7M Ω and 3.9M Ω to all exposed parts*. (Fig.1) / Equipment without antenna terminals should read approximately infinity to all exposed parts. (Fig.2) / *Note : Some exposed parts may be isolated from the chassis by design. These will read infinity.**
4. **If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and re-checked before it is returned to the customer.**

Fig.1

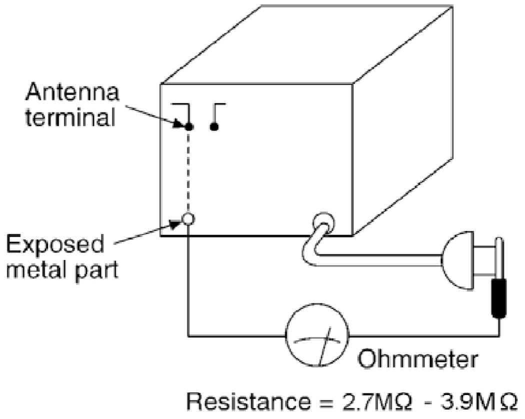
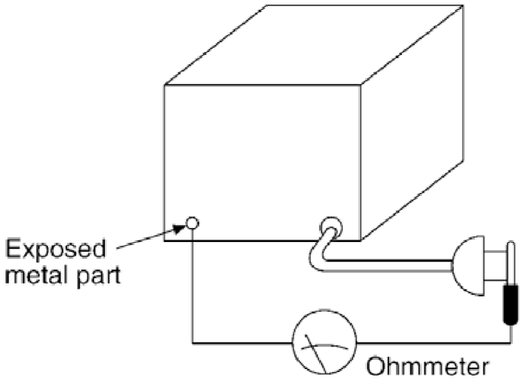


Fig.2



Resistance = Approx ∞

2. Before Repair and Adjustment

Disconnect AC power, discharge Power Supply Capacitors C520 and C540 through a 10 Ω , 5W resistor to ground.

DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.

After repairs are completed, restore power gradually using a variac, to avoid overcurrent.

Current consumption at AC 120V, 60 Hz in NO SIGNAL mode (volume min at CD mode) should be ~600mA.

3. Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- No sound is heard when the power is turned on.

- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are

“shorted”, or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.

If this occurs, follow the procedure outlines below:

1. Turn off the power.

2. Determine the cause of the problem and correct it.

3. Turn on the power once again after one minute.

Note :

When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

4. Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor “chip” components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

1. **Immediately before handling any semiconductor component or semiconductor-equiped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.**
2. **After removing an electrical assembly equiped with ES devices, place the assembly on a conductive surface such as aluminium foil, to prevent electrostatic charge build up or exposure of the assembly.**
3. **Use only a grounded-tip soldering iron to solder or unsolder ES devices.**
4. **Use only an anti-static solder remover device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge to damage ES devices.**
5. **Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.**
6. **Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminium foil or comparable conductive material).**
7. **Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.**

   Caution

   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. **Minimize body motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).**

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are imporant for safety. These parts are marked by ⚠ in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

5. Handling the Lead-free Solder

5.1. About lead free solder (PbF)

Distinction of PbF P.C.B.:

P.C.B.s (manufactured) using lead free solder will have a PbF stamp on the P.C.B.

Caution:

- **Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a high temperature soldering iron. In case of soldering iron with temperature control, please set it to 700 ± 20°F (370 ± 10°C).**
- **Pb free solder will tend to splash when heated too high (about 1100°F/600°C).**
- **When soldering or unsoldering, please completely remove all of the solder on the pins or solder area, and be sure to heat the soldering points with the Pb free solder until it melts enough.**

6. Handling Precautions For Traverse Deck

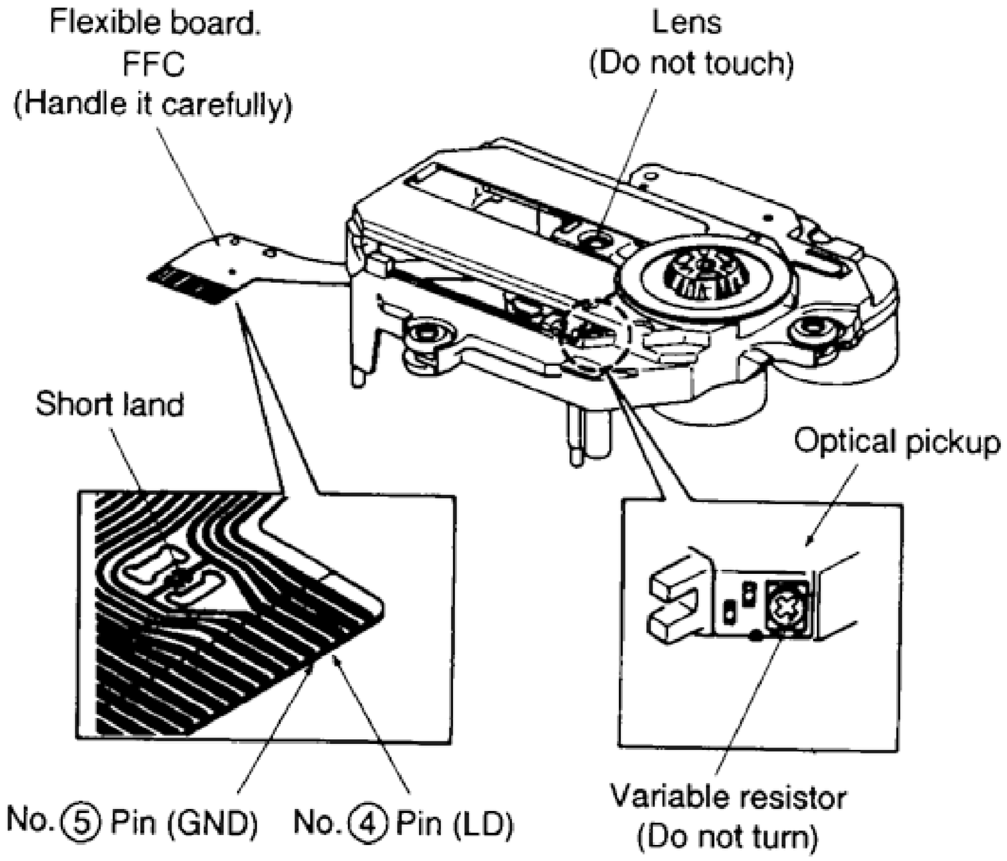
The laser diode in the traverse deck (optical pickup) may break down due to potential difference caused by static electricity of clothes or human body.

So, be careful of electrostatic breakdown during repair of the traverse deck (optical pickup).

- Handling of traverse deck (optical pickup)

1. **Do not subject the traverse deck (optical pickup) to static electricity as it is extremely sensitive to electrical shock.**
2. **The short land between the No.4(LD) and No.5(GND) pins on the flexible board (FFC) is shorted with a solder build-up to prevent damage to the laser diode.To connect to the PC board, be sure to open by removing the solder build-up, and finishthe work quickly.**
3. **Take care not to apply excessive stress to the flexible board (FFC).**
4. **Do not turn the variable resistor (laser power adjustment). It has already been adjusted.**

Fig 6.1


Flexible board.
FFC
(Handle it carefully)
Lens
(Do not touch)
Short land
Optical pickup
No.⑤ Pin (GND)
No.④ Pin (LD)
Variable resistor
(Do not turn)

- Grounding for electrostatic breakdown prevention

1. Human body grounding

Use the anti-static wrist strap to discharge the static electricity from your body.

2. Work table grounding

Put a conductive material (sheet) or steel sheet on the area where the traverse deck (optical pickup) is placed, and ground the sheet.

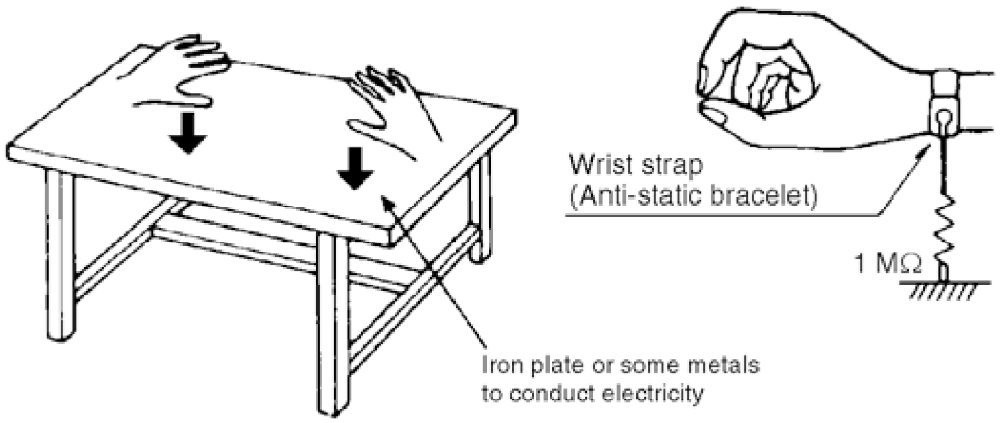
Caution :

The static electricity of your clothes will not be grounded through the wrist strap. So, take care not to let your clothes touch the traverse deck (optical pickup).

Caution when Replacing the Traverse Deck :

The traverse deck has a short point shorted with solder to protect the laser diode against electroststics breakdown. Be sure to remove the solder from the short point before making connections.

Fig 6.2



7. Precaution of Laser Diode

CAUTION:

This unit utilizes a class 1 laser.
Invisible laser radiation is emitted from the optical pickup lens.
Wavelength: 780nm.
When the unit is turned on:

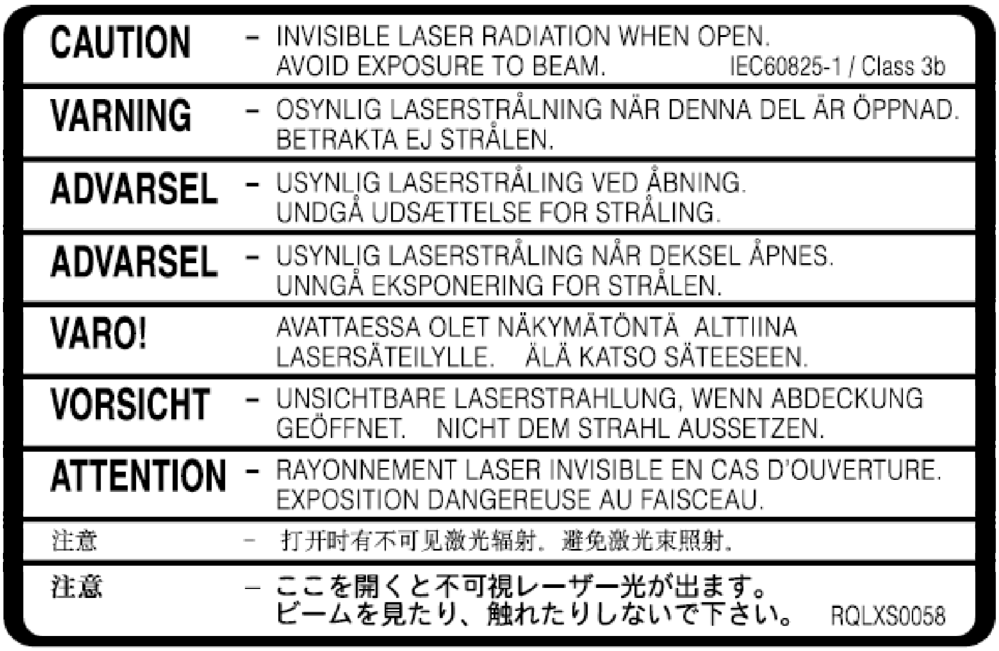
1. **Do not look directly into the pick up lens.**
2. **Do not use optical instruments to look at the pick up lens.**
3. **Do not adjust the preset variable resistor on the pickup lens.**
4. **Do not disassemble the optical pick up unit.**
5. **If the optical pick up is replaced, use the manufacturer's specified replacement pick up only.**
6. **Use of control or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.**

CAUTION!

THIS PRODUCT UTILIZES A LASER.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN TH
SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

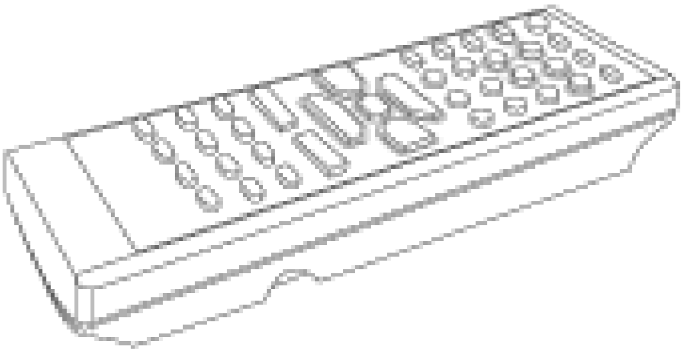
■ Use of caution label



CAUTION	–	INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM. IEC60825-1 / Class 3b
VARNING	–	OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRAKTA EJ STRÅLEN.
ADVARSEL	–	USYNLIG LASERSTRÅLING VED ÅBNING. UNDGÅ UDSÆTTELSE FOR STRÅLING.
ADVARSEL	–	USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES. UNNGÅ EKSPONERING FOR STRÅLEN.
VARO!		AVATTAESSA OLET NÄKYMÄTÖNTÄ ALTTIINA LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
VORSICHT	–	UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.
ATTENTION	–	RAYONNEMENT LASER INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.
注意	–	打开时有不可见激光辐射。避免激光束照射。
注意	–	ここを開くと不可視レーザー光が出ます。 ビームを見たり、触れたりしないで下さい。 RQLXS0058

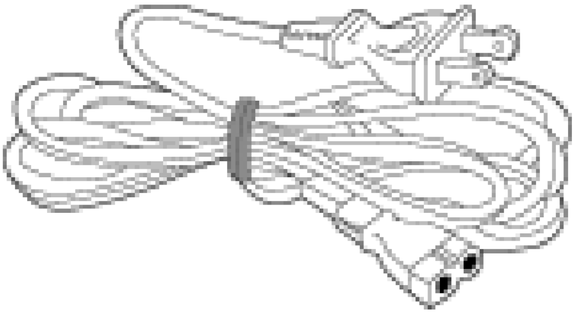
8. Accessories

Remote Control Transmitter

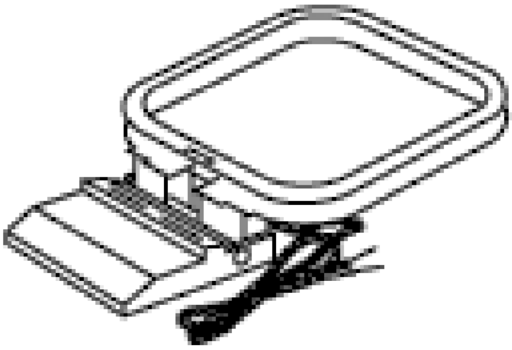


FM Indoor Antenna

AC Power Supply Cord



AM Loop Antenna

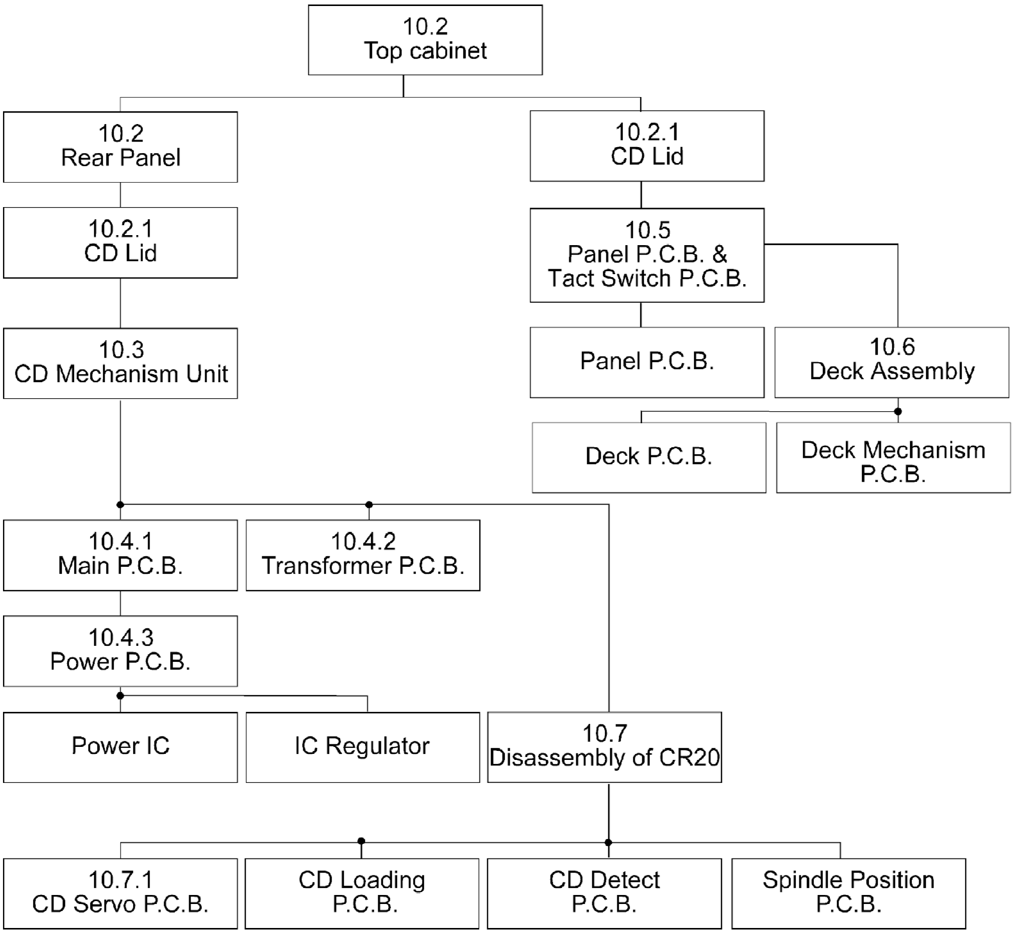


9. Operation Procedures

10. Disassembly and Assembly of Main Component

10.1. Disassembly flow chart

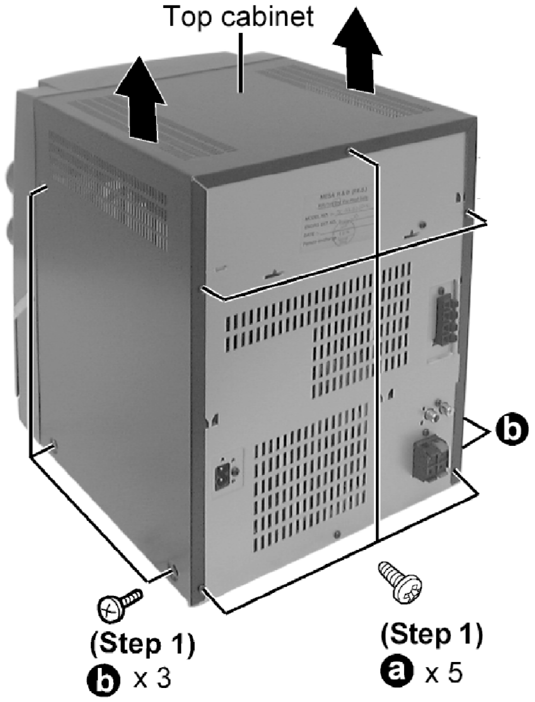
The following chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing.
To assemble the unit, reverse the steps shown in the chart as below.


10.2
Top cabinet
10.2
Rear Panel
10.2.1
CD Lid
10.2.1
CD Lid
10.5
Panel P.C.B. &
Tact Switch P.C.B.
10.3
CD Mechanism Unit
Panel P.C.B.
10.6
Deck Assembly
Deck P.C.B.
Deck Mechanism
P.C.B.
10.4.1
Main P.C.B.
10.4.2
Transformer P.C.B.
10.4.3
Power P.C.B.
Power IC
IC Regulator
10.7
Disassembly of CR20
10.7.1
CD Servo P.C.B.
CD Loading
P.C.B.
CD Detect
P.C.B.
Spindle Position
P.C.B.

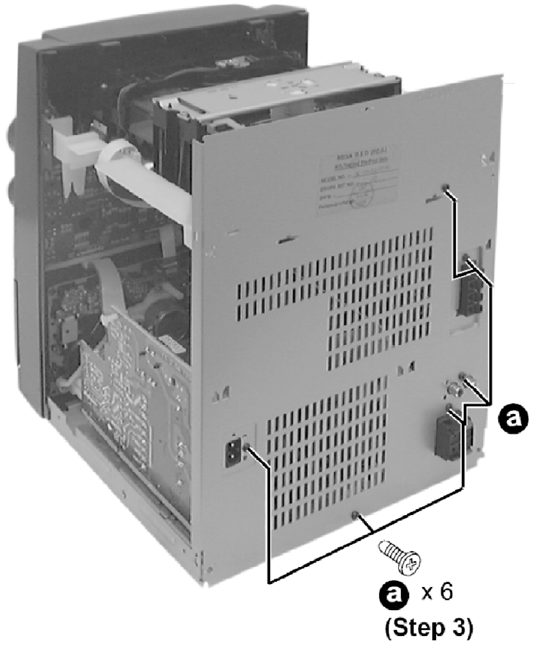
10.2. Disassembly of Top Cabinet and Rear Panel

Step 1 Remove 3 screws on each side and 5 screws at rear panel.

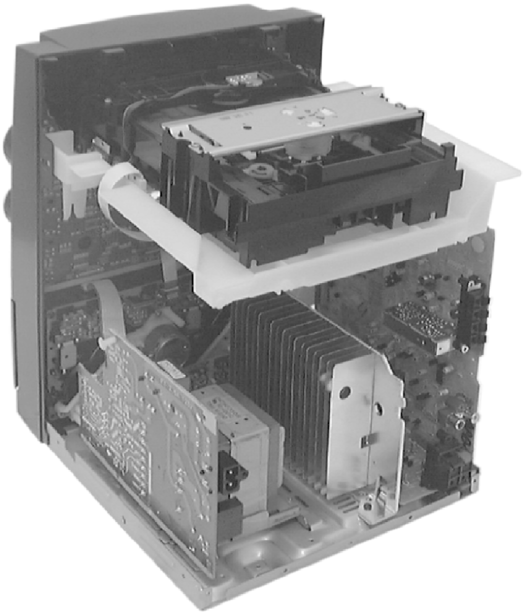
Step 2 Lift up both sides of top cabinet, push the cabinet ass’y toward the rear and remove it.


Top cabinet
b
(Step 1)
b x 3
(Step 1)
a x 5

- Disassembly of Rear Panel



Step 3 Remove 6 screws.



Step 4 Draw rear panel backward to remove it.

10.2.1. Disassembly for CD Lid

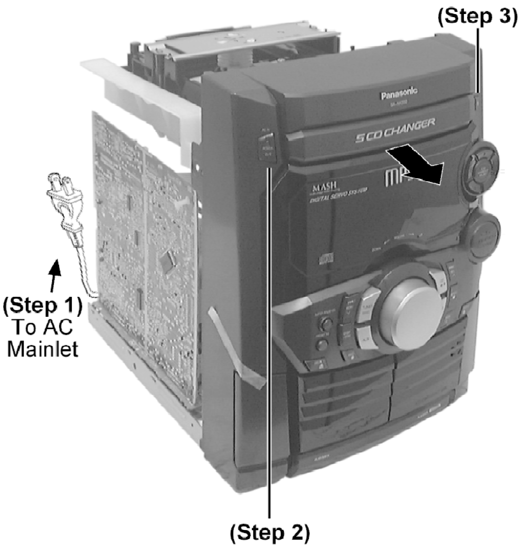
(The CD changer unit can be removed after the CD Lid is removed)

- Follow the (Step 1) - (Step 5) of Item 10.2 - Disassembly of Top Cabinet and Rear Panel

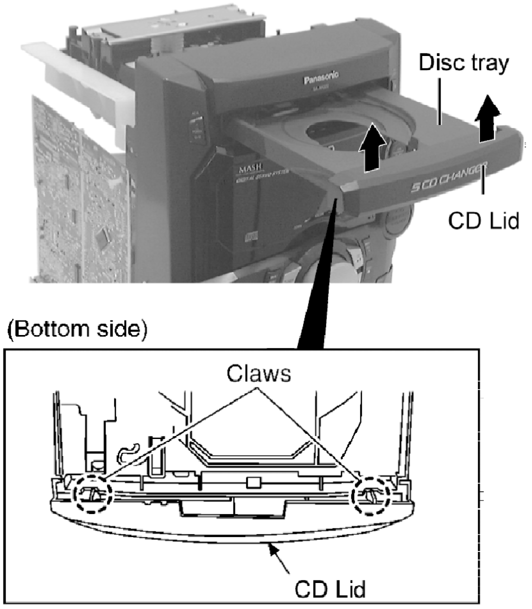
When opening the disc tray automatically (Using Power Supply)

Step 1 Connect the AC power cord.

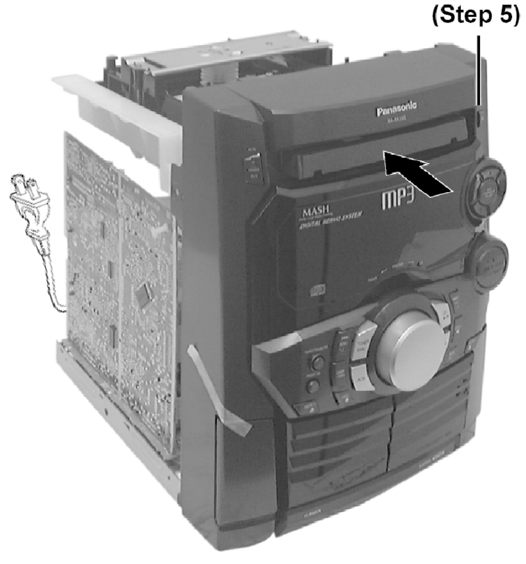
Step 2 Press the POWER button to power up the main unit.


(Step 3)
Panasonic
5 CD CHANGER
MASH
(Step 1)
To AC
Mainlet
(Step 2)

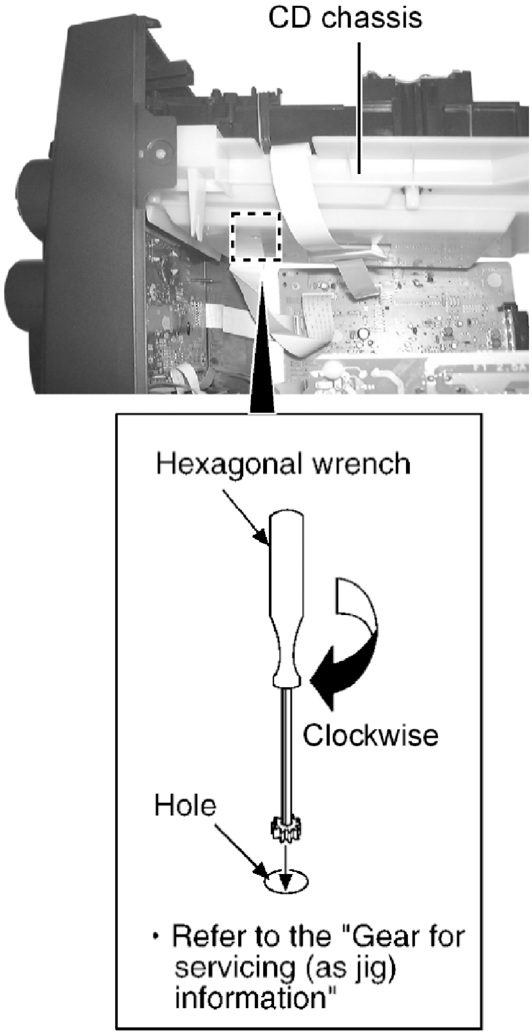
Step 3 Press the OPEN/CLOSE button, the disc tray will open automatically.


Disc tray
CD Lid
(Bottom side)
Claws
CD Lid

Step 4 Release the 2 claws, and then remove the CD Lid.

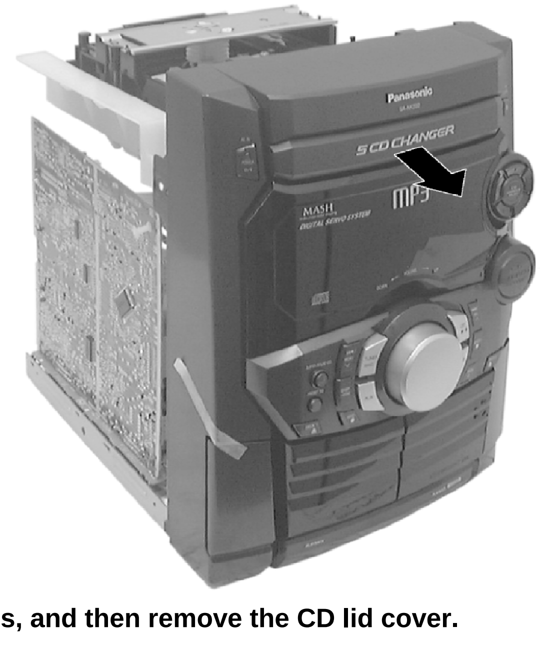


Step 5 Press the OPEN/CLOSE button, the disc tray will close.
[Open the disc tray manually (Using service tools)]

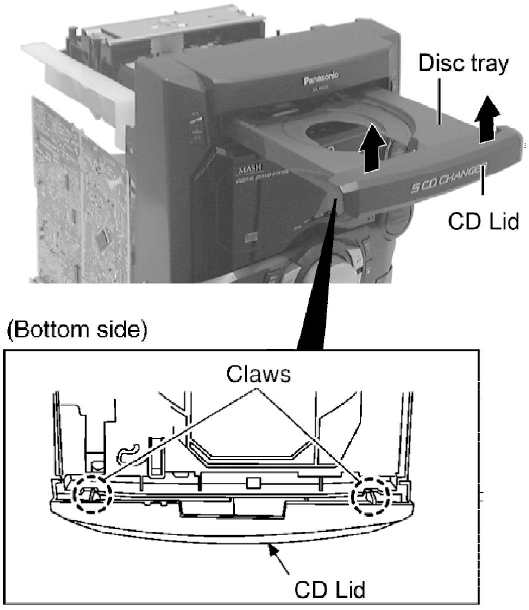

CD chassis
Hexagonal wrench
Clockwise
Hole

• Refer to the "Gear for servicing (as jig) information"

Step 1 Insert the gear tool into the hole on the underside of CD chassis and then rotate in the direction of arrow. The disc tray will be open.


Panasonic
5 CD CHANGER
MASH

Step 2 Release the 2 claws, and then remove the CD lid cover.


Disc tray
CD Lid
(Bottom side)
Claws
CD Lid

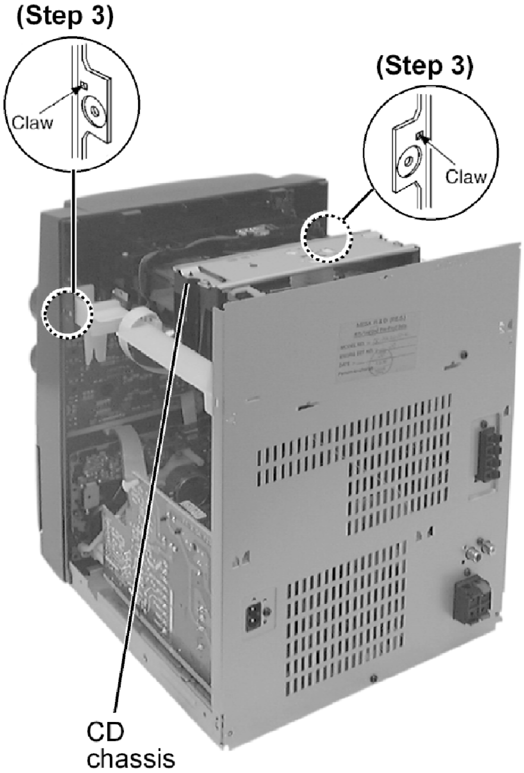
Step 3 Repeat Step 2 but rotate the gear tools in anti-clockwise direction.

Step 4 The disc tray will be close.

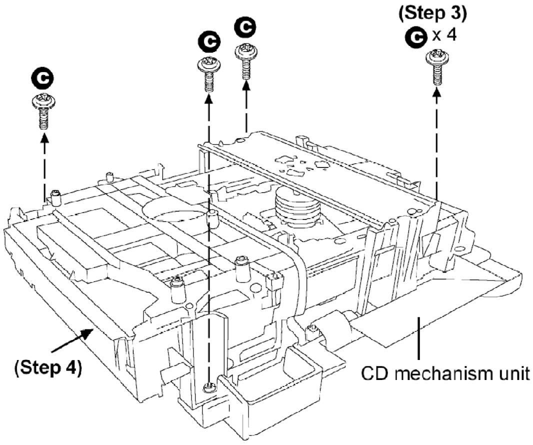
10.3. Disassembly of CD Mechanism Unit

- **Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet and Rear Panel**
- **Follow the (Step 1) - (Step 5) of Item 10.2.1 - Disassembly for CD Lid**

Step 1 Detach the FFC boards (CN309 & CN310).


(Step 3)
Claw
(Step 3)
Claw
CD chassis

Step 2 Release the claws of both ends, and then lift up the CD Mechanism Unit.


(Step 3)
x 4
(Step 4)
CD mechanism unit

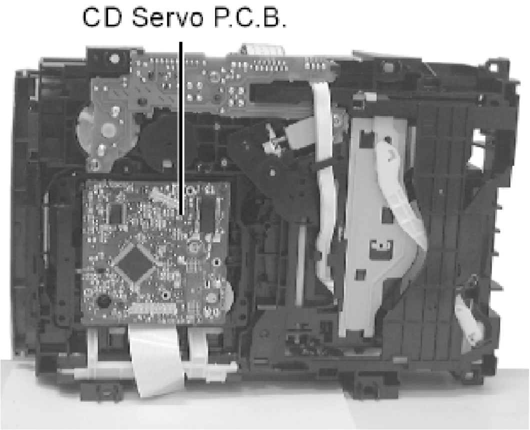
Step 3 Remove 4 screws.

Step 4 Remove the CD chassis.

Step 5 Lay the CD mechanism unit as shown.

- Note:

For disassembly of CD mechanism unit, please refer to Section 10.7 of this manual.

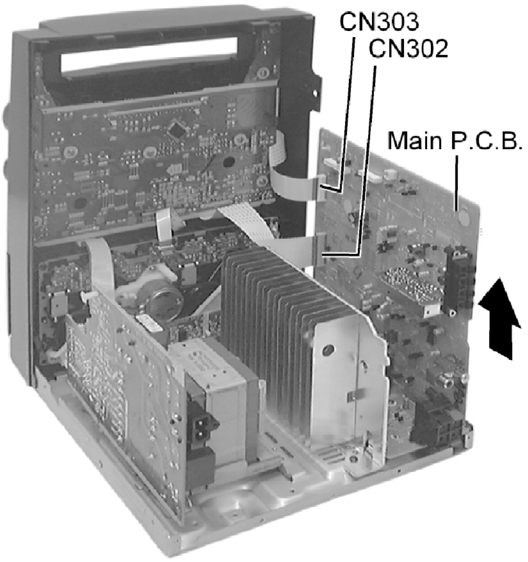


10.4. Disassembly Main P.C.B., Transformer P.C.B. & Power P.C.B.

10.4.1. Disassembly for the Main P.C.B.

- **Follow the (Step 1) - (Step 4) of Item 10.2 - Disassembly of Top Cabinet and Rear Panel**
- **Follow the (Step 1) - (Step 5) of Item 10.2.1 - Disassembly for CD Lid**
- **Follow the (Step 1) - (Step 2) of Item 10.3 - Disassembly of the CD Mechanism Unit**

Step 1 Disconnect FFC boards at CN303, CN302 & CN304 .

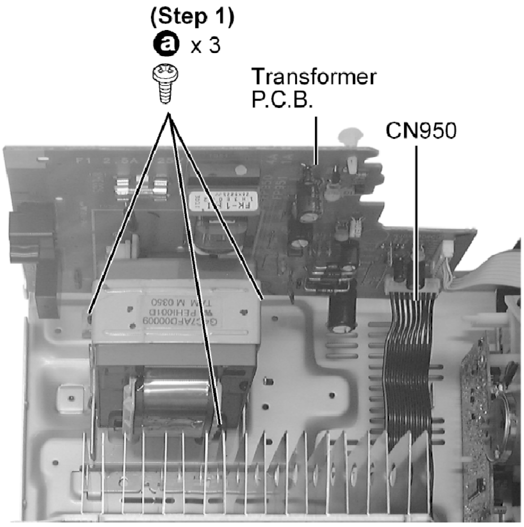


Step 2 Lift up Main P.C.B. by disconnect CN500 & CN501 as arrow shown above.

10.4.2. Disassembly of the Transformer P.C.B.

- **Follow the (Step 1) - (Step 4) of Item 10.2 - Disassembly of Top Cabinet and Rear Panel**
- **Follow the (Step 1) - (Step 5) of Item 10.2.1 - Disassembly for CD Lid**
- **Follow the (Step 1) - (Step 2) of Item 10.3 - Disassembly of the CD Mechanism Unit**

Step 1 Remove 3 screws.


(Step 1)
a x 3
Transformer P.C.B.
CN950

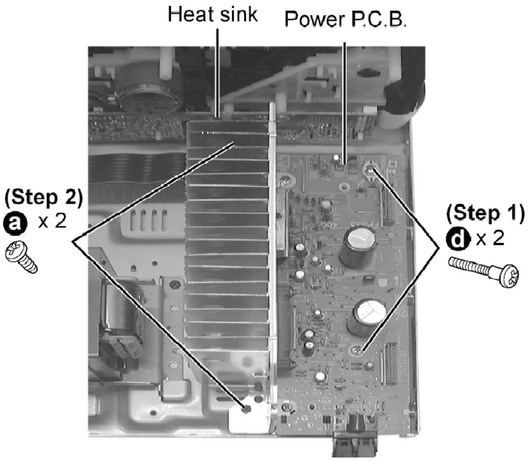
Step 2 Disconnect connector CN950.

10.4.3. Disassembly of the Power P.C.B.

- **Follow the (Step 1) - (Step 4) of Item 10.2 - Disassembly of Top Cabinet and Rear Panel**
- **Follow the (Step 1) - (Step 5) of Item 10.2.1 - Disassembly for CD Lid**
- **Follow the (Step 1) - (Step 2) of Item 10.3 - Disassembly of the CD Mechanism Unit**
- **Follow the (Step 1) - (Step 2) of Item 10.4.1 - Disassembly for the Main P.C.B.**

Step 1 Remove 2 screws.

Step 2 Remove the 2 screws fixed at heat sink.

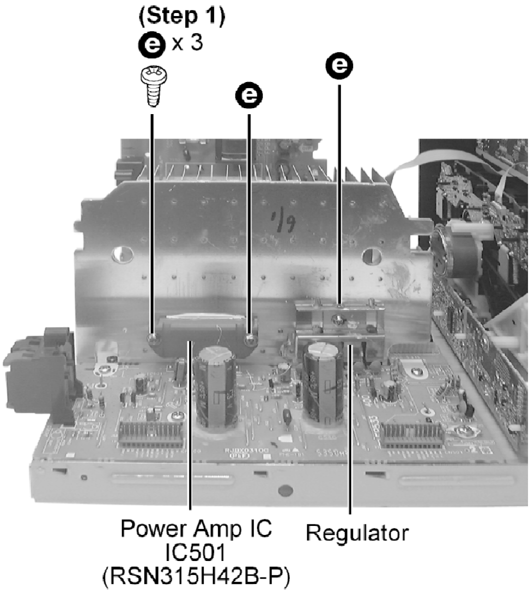

Heat sink
Power P.C.B.
(Step 2)
a x 2
(Step 1)
d x 2

NOTE:

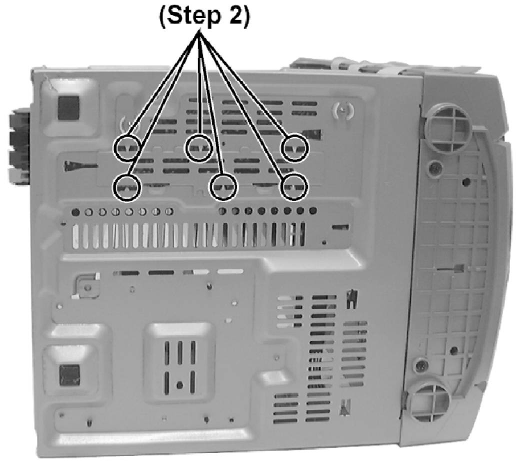
Insulate Power P.C.B. with insulation material to avoid short circuit.

- **Replacement of Power Amplifier IC & Voltage Regulator**

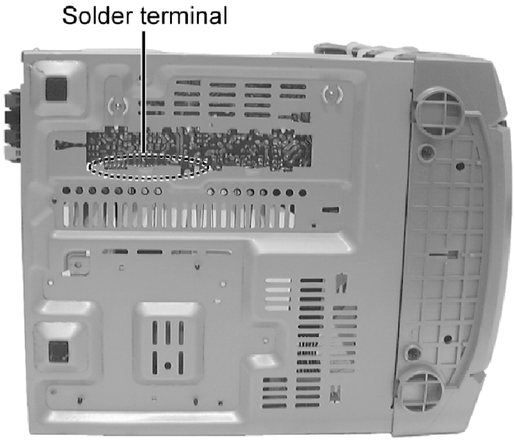
Step 1 Remove 2 screws (For Power Amp IC) and 1 screw (For Voltage Regulator) .


(Step 1)
e x 3
e
e
Power Amp IC
IC501
(RSN315H42B-P)
Regulator

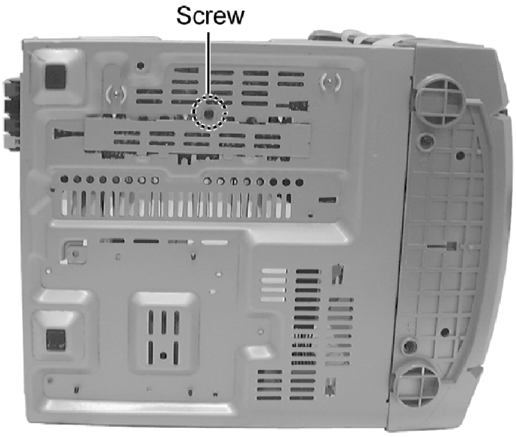
Step 2 Break the joint with a metal cutter as shown below.



Step 3 Unsolder the terminals of Power Amp IC, transistor and replace the components.


Solder terminal

Step 4 Fix back the cutted portion with a screw as shown.



10.5. Disassembly of Panel P.C.B. & Tact Switch P.C.B.

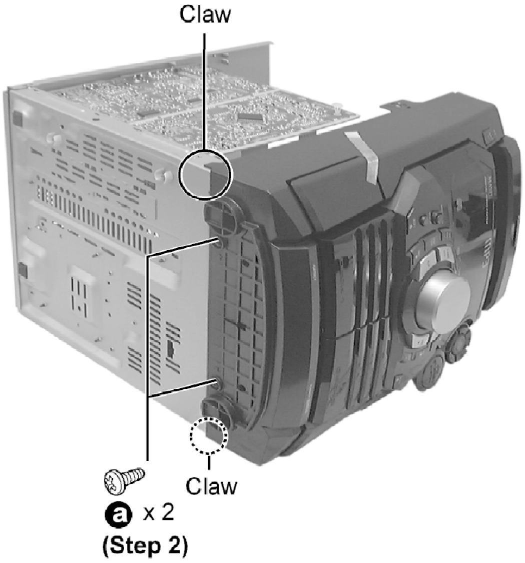
- Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet and Rear Panel

- Follow the (Step 1) - (Step 5) of Item 10.2.1 - Disassembly for CD Lid

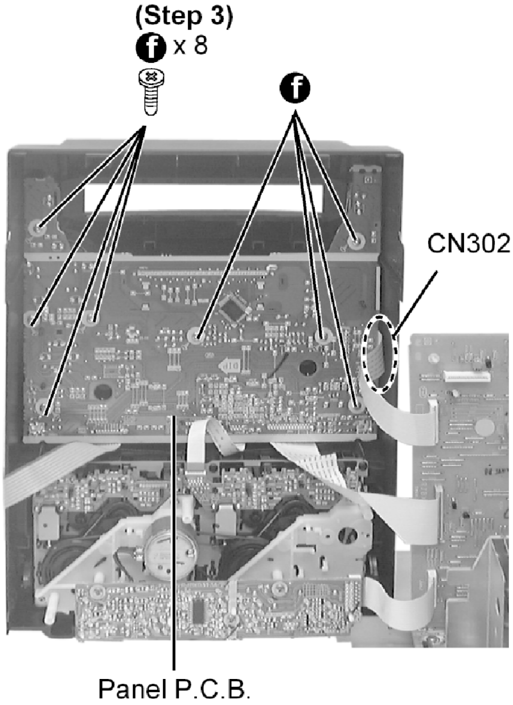
- Follow the (Step 1) - (Step 5) of Item 10.3 - Disassembly of the CD Mechanism Unit

- Disassembly of Panel P.C.B.

Step 1 Lay the unit as shown below.



Step 2 Remove 2 screws, release 2 claws, and then draw the front panel ass’y forward.

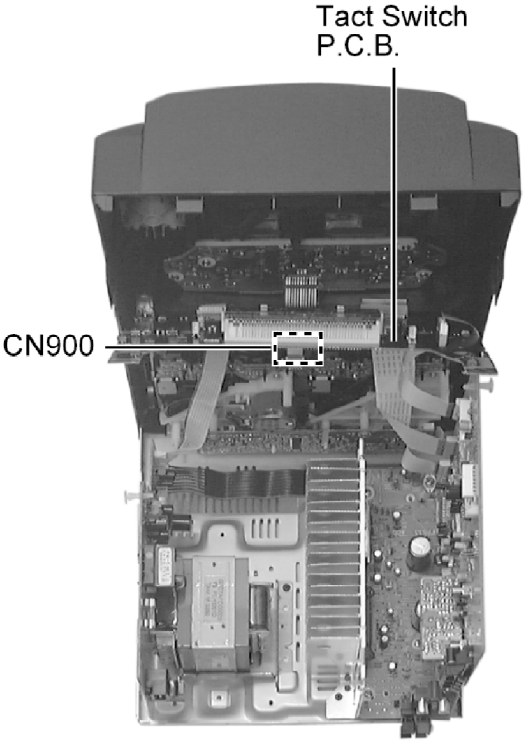

(Step 3)
f x 8
f
CN302
Panel P.C.B.

Step 3 Remove the 8 screws.

Step 4 Disconnect FFC board (CN302).

- Disassambly of Tact Switch P.C.B.

Step 5 Disconnect connector CN900.


Tact Switch
P.C.B.
CN900

Step 6 Pull out the volume knob.

Step 7 Pull Panel P.C.B. forward.

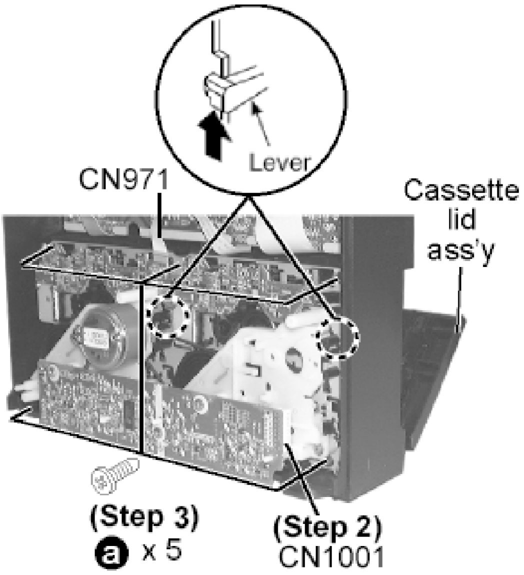
10.6. Disassembly of Deck Mechanism Unit & Deck P.C.B.

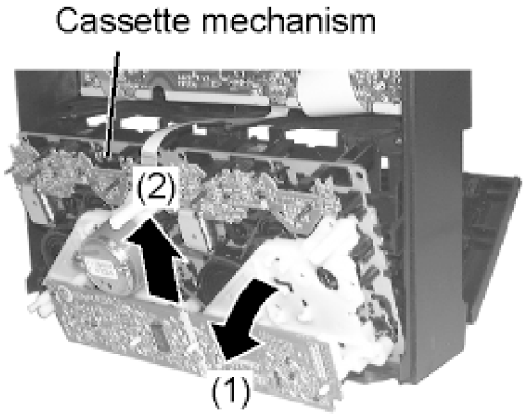
- **Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet and Rear Panel**
- **Follow the (Step 1) - (Step 5) of Item 10.2.1 - Disassembly for CD Lid**
- **Follow the (Step 1) - (Step 2) of Item 10.3 - Disassembly of the CD Mechanism Unit**

Step 1 Detach FFC board. (CN971)

Step 2 Disconnect FFC flat cable from the connector (CN1001).

Step 3 Remove the 5 screws.

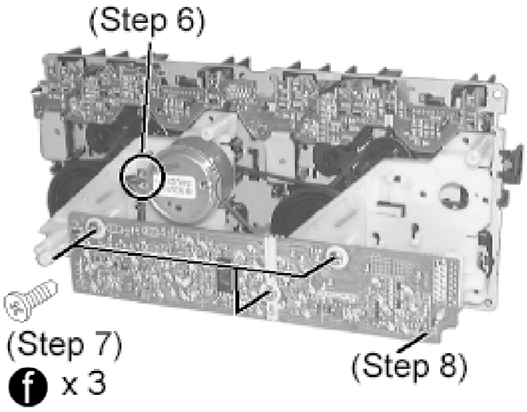

Lever
CN971
Cassette lid ass'y
(Step 3)
ⓐ x 5
(Step 2)
CN1001


Cassette mechanism
(2)
(1)

Step 4 Push the lever upward, and then open the cassette lid ass'y (For DECK1 and DECK2).

Step 5 Tilt the cassette mechanism unit in the direction of arrow (1), and then remove it in the direction of arrow (2).

- **For replacement of Deck P.C.B.**


(Step 6)
(Step 7)
x 3
(Step 8)

Step 6 Unsolder the motor terminals.

Step 7 Remove 3 screws.

Step 8 Remove Deck P.C.B.

10.7. CD Mechanism Main Component Replacement Procedures

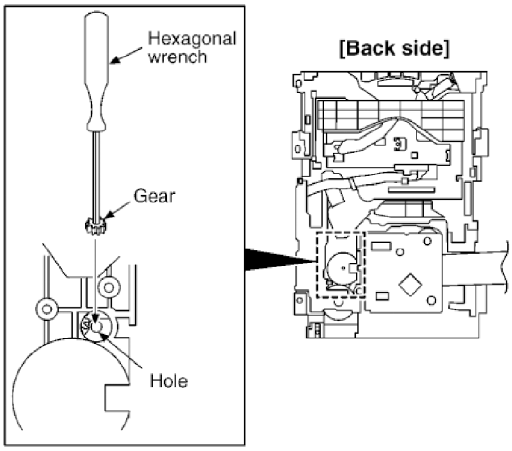
- Follow the (Step 1) - (Step 4) of Item 10.2 - Disassembly of Top Cabinet and Rear Panel

- Follow the (Step 1) - (Step 5) of Item 10.2.1 - Disassembly for CD Lid

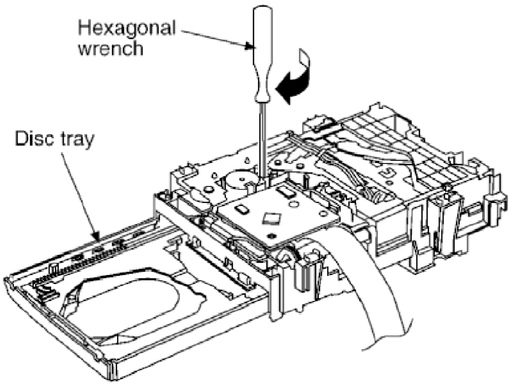
- Follow the (Step 1) - (Step 5) of Item 10.3 - Disassembly of the CD Mechanism Unit

10.7.1. Replacement of the Traverse Deck

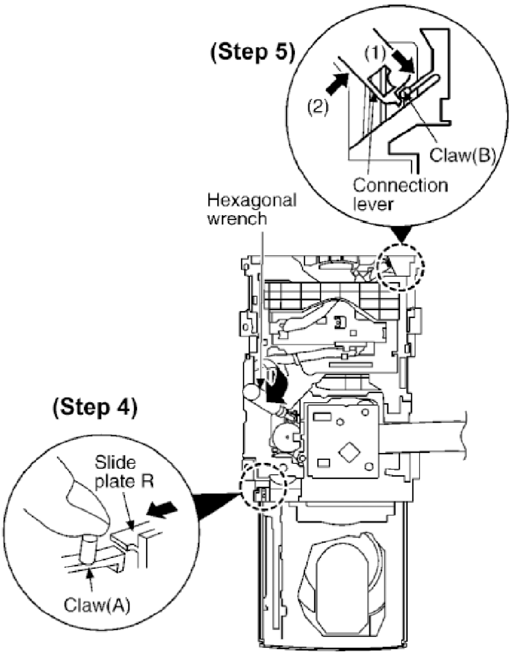
Step 1 Remove the CD changer unit.


Hexagonal wrench
Gear
Hole
[Back side]

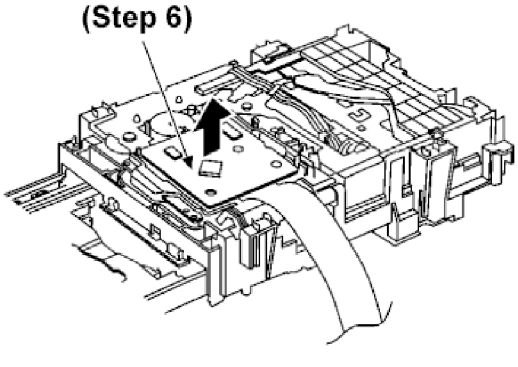
Step 2 Insert the gear with hexagonal wrench into the hole.


Hexagonal wrench
Disc tray

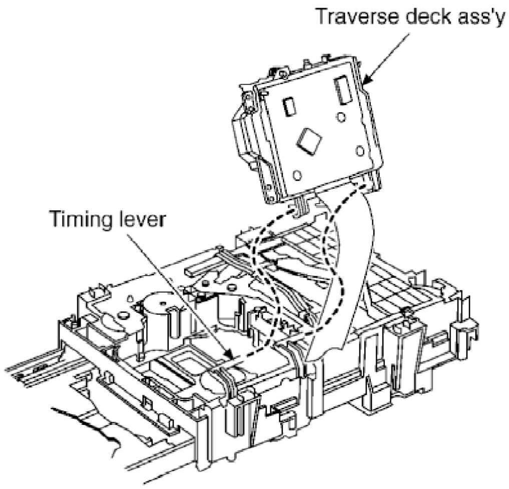
Step 3 Rotate the hexagonal wrench in the direction of arrow (clockwise), and then open the disc tray fully.


(Step 5)
(1)
(2)
Claw(B)
Connection lever
Hexagonal wrench
(Step 4)
Slide plate R
Claw(A)

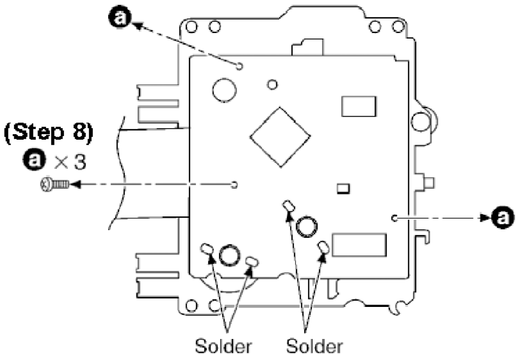
Step 4 With pressing the claw (A), rotate the hexagonal wrench clockwise. (The slide plate R moves for a little amount.)
Step 5 Pressing the claw (B) in the direction of arrow (1), the connection lever moves in the direction of arrow (2).



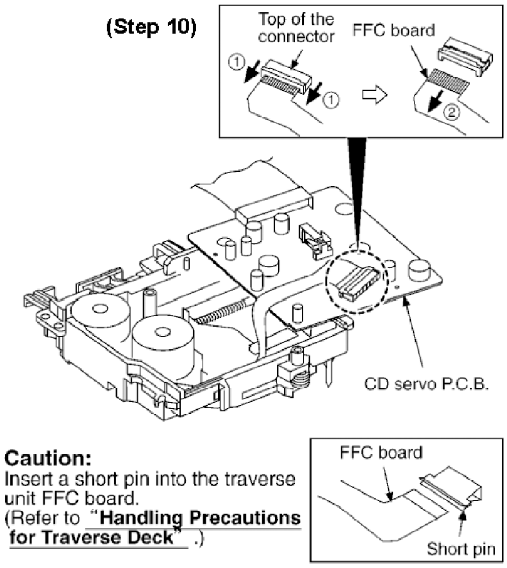
Step 6 Lift up the traverse deck ass'y.


Traverse deck ass'y
Timing lever

Step 7 Remove the traverse deck ass’y from the timing lever.
Caution:
When removing or inserting the traverse deck avoid touching the OPU lens and pressing onto the turntable.

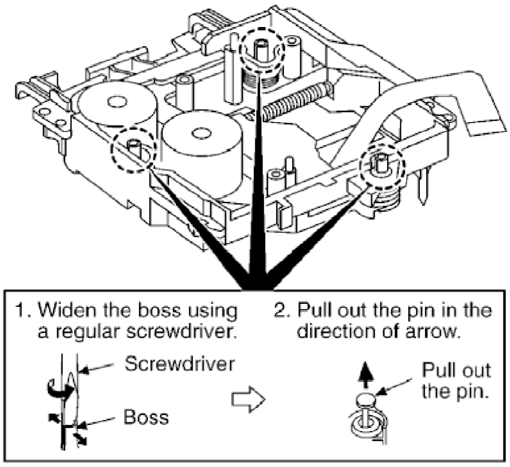

a
(Step 8)
a × 3
a
Solder
Solder

Step 8 Remove 3 screws.
Step 9 Unsolder the motor terminals (4 points).

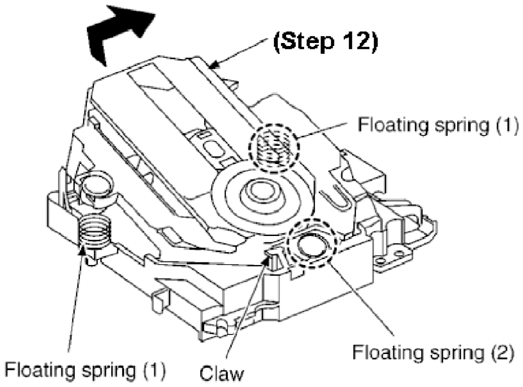

(Step 10)
Top of the connector
FFC board
①
①
②
CD servo P.C.B.
FFC board
Short pin

Caution:
Insert a short pin into the traverse unit FFC board.
(Refer to “**Handling Precautions for Traverse Deck**” .)

Step 10 Remove the FFC board from the connector, and then remove the CD Servo P.C.B.


1. Widen the boss using a regular screwdriver.
2. Pull out the pin in the direction of arrow.
Screwdriver
Boss
Pull out the pin.

Step 11 Remove the pin.


(Step 12)
Floating spring (1)
Floating spring (1)
Claw
Floating spring (2)

Step 12 Release the claw, and then remove the traverse deck ass'y.

Note:

Be careful not to lose the 3 floating spring because those will also be removed on removal of the traverse deck ass'y.

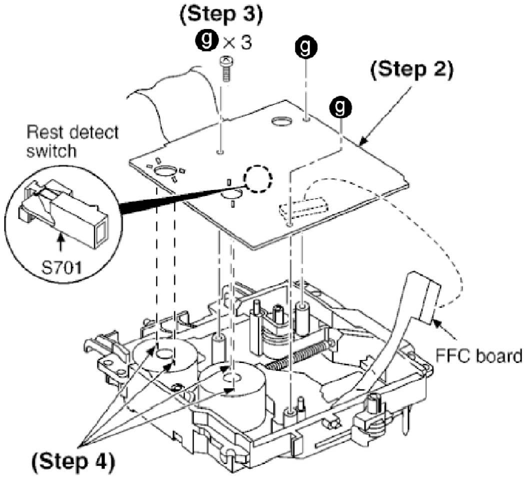
- Installation of the CD Servo P.C.B. after replacement

Step 1 Connect the FFC board.

Step 2 Install the CD servo P.C.B. in the traverse deck ass'y.

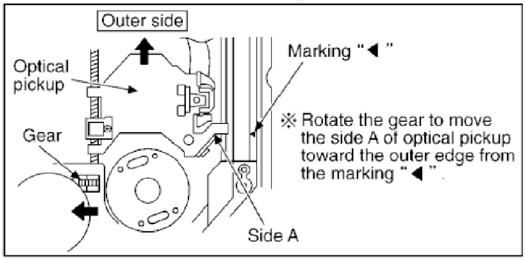
Step 3 Remove 3 screws.

Step 4 Solder.


(Step 3)
g × 3
g
(Step 2)
g
Rest detect switch
S701
FFC board
(Step 4)

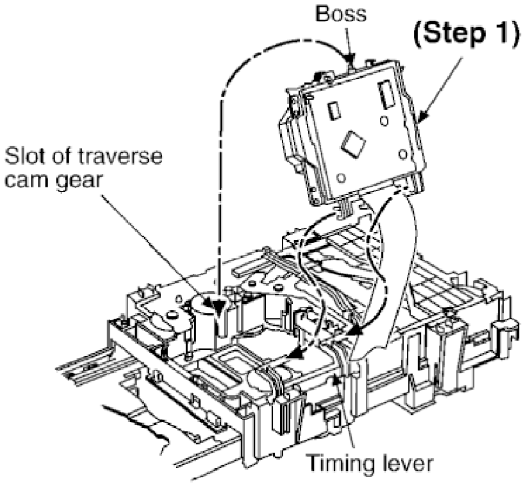
- Note for installation of the CD servo P.C.B.

Before installing the CD servo P.C.B., move the optical pickup toward the outer edge from the mark "◀".
[Otherwise, the rest detect switch (S701) mounted on the CD servo P.C.B. may be damaged.]

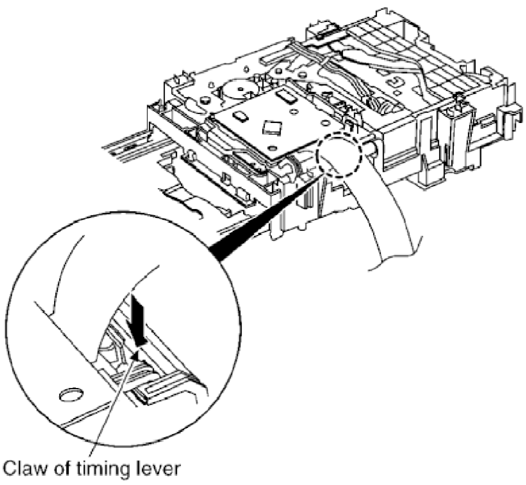

Outer side
Optical pickup
Gear
Marking "◀"
Side A

※ Rotate the gear to move the side A of optical pickup toward the outer edge from the marking "◀".

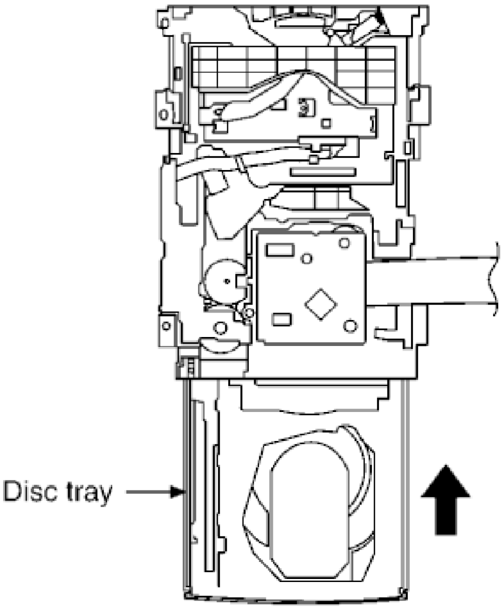
- Installation for traverse deck ass'y


Boss
(Step 1)
Slot of traverse cam gear
Timing lever

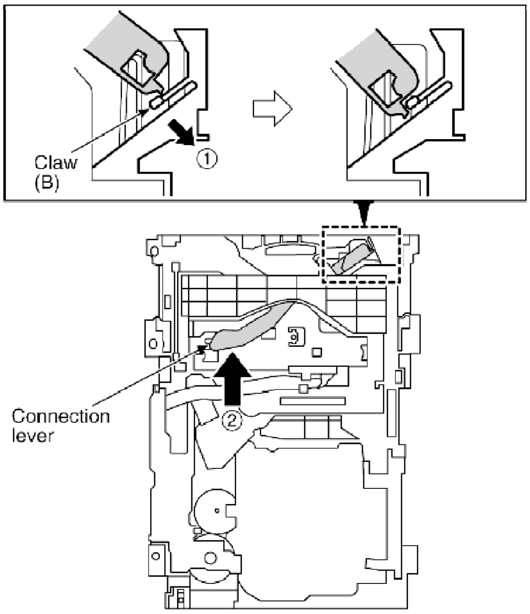
Step 1 Install the traverse deck ass'y to the timing lever.
Step 2 Align the boss of traverse deck ass'y with the slot of traverse cam gear.


Claw of timing lever

Step 3 Force the claw of timing lever.



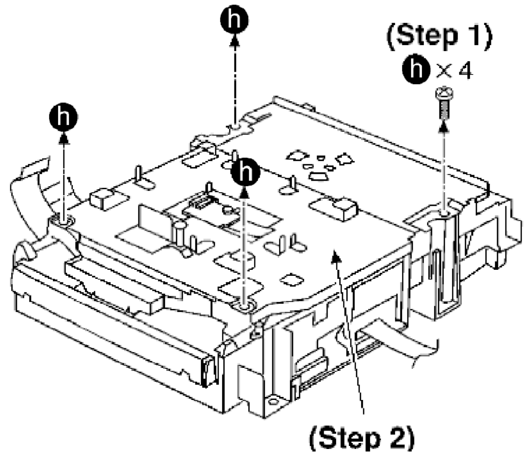
Step 4 Force the disc tray fully.


Claw
(B)
①
②
Connection
lever

Step 5 With pressing the claw (B) in the direction of arrow (1), force the connection lever in the direction of arrow (2).

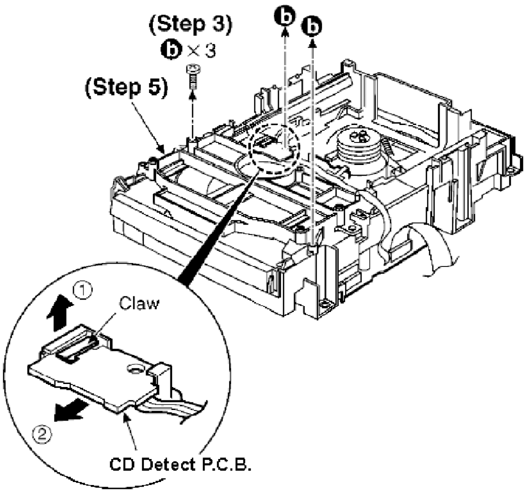
10.7.2. Replacement for the Disc Tray

Step 1 Remove 4 screws.


h
h
h
h
(Step 1)
h × 4
(Step 2)

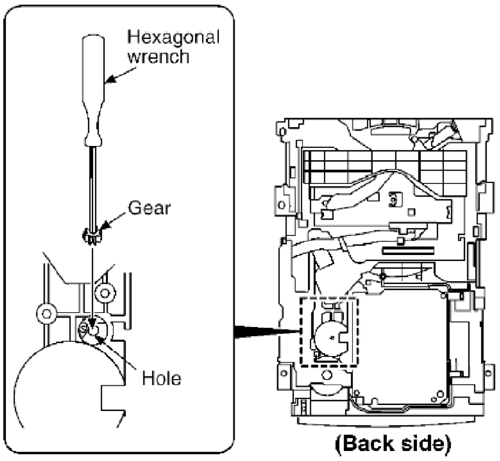
Step 2 Remove the upper plate.

Step 3 Remove 3 screws.

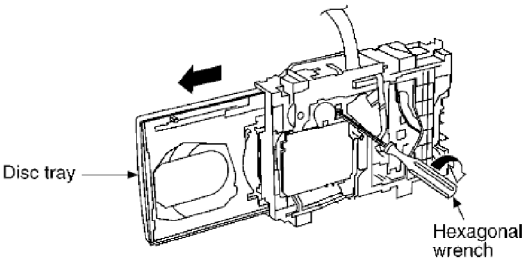

(Step 3)
b × 3
b
b
(Step 5)
①
Claw
②
CD Detect P.C.B.

Step 4 With lifting the claw in the direction of (1), draw the CD Detect P.C.B. in the direction of arrow (2).

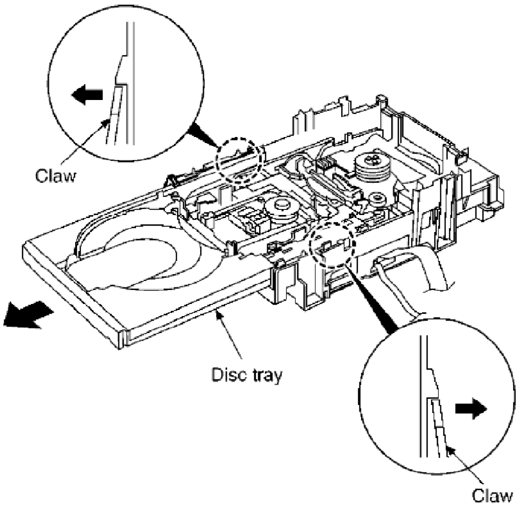
Step 5 Remove the mechanism cover.


Hexagonal wrench
Gear
Hole
(Back side)

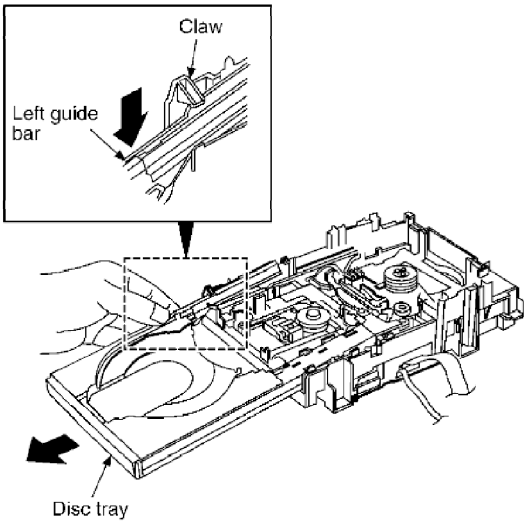
Step 6 Insert the gear with hexagonal wrench into the hole.


Disc tray
Hexagonal wrench

Step 7 Rotate the hexagonal wrench in the direction of arrow, and then open the disc tray fully.

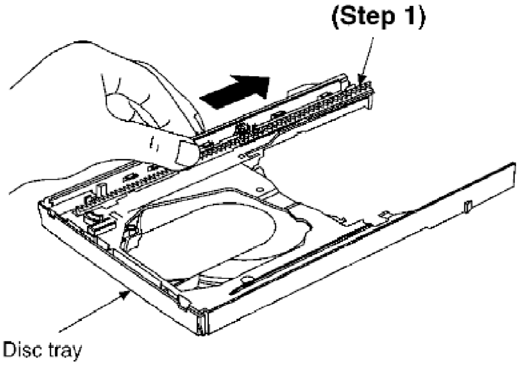

Claw
Disc tray
Claw

Step 8 Release the both claws, and then draw the disc tray.

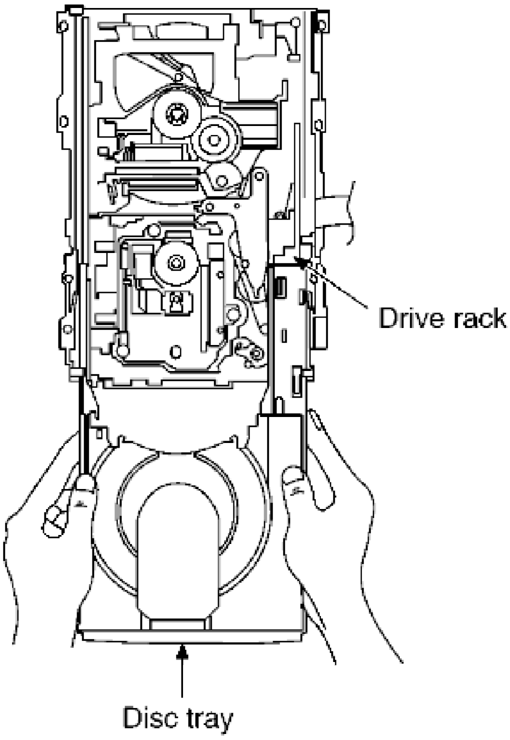

Claw
Left guide bar
Disc tray

Step 9 With forcing the left guide bar manually because the left guide bar interfers with claw, draw the disc tray.

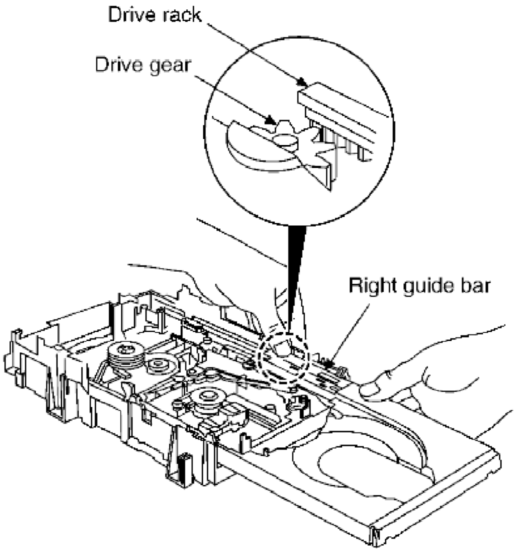
[Installation of the disc tray after replacement]


(Step 1)
Disc tray

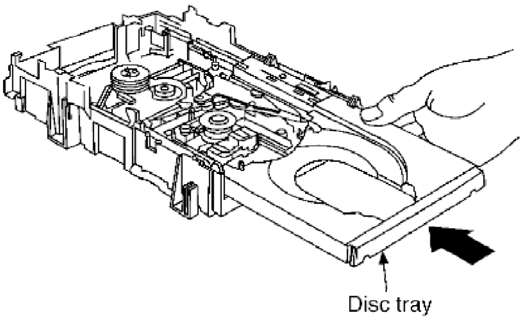
Step 1 Slide the drive rack fully in the direction of arrow.


Drive rack
Disc tray

Step 2 Holding the drive rack not to move, install the disc tray.
Step 3 Align the drive rack with the drive gear.


Drive rack
Drive gear
Right guide bar

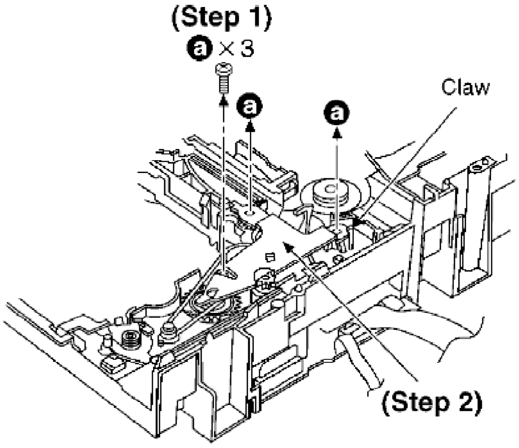
NOTE:
Force the right guide bar of tray base manually not to move upwards.



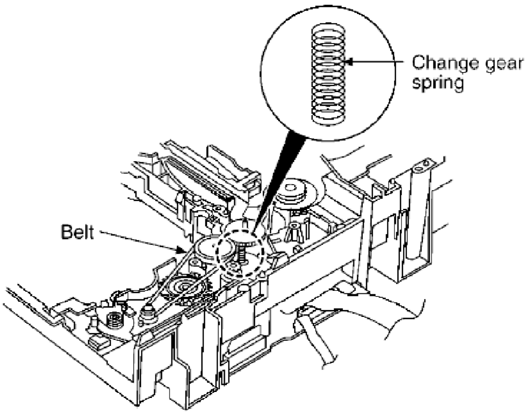
Step 4 Holding the disc tray manually, push the disc tray in the direction of the arrow.

10.7.3. Disassembly and reassembly for mechanism base drive unit

Step 1 Remove 3 screws.


(Step 1)
ⓐ×3
ⓐ
ⓐ
Claw
(Step 2)

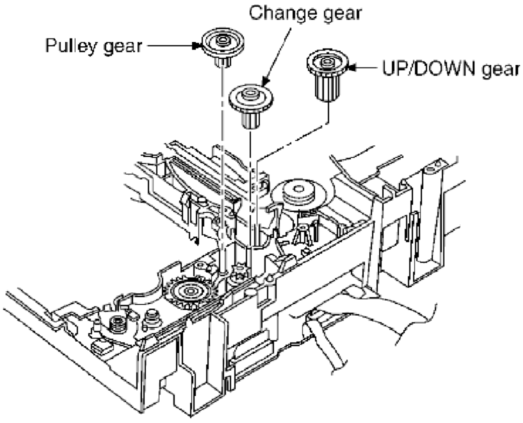
Step 2 Release the claw, and then remove the gear holder.
Step 3 Remove the belt and change gear spring.


Change gear spring
Belt

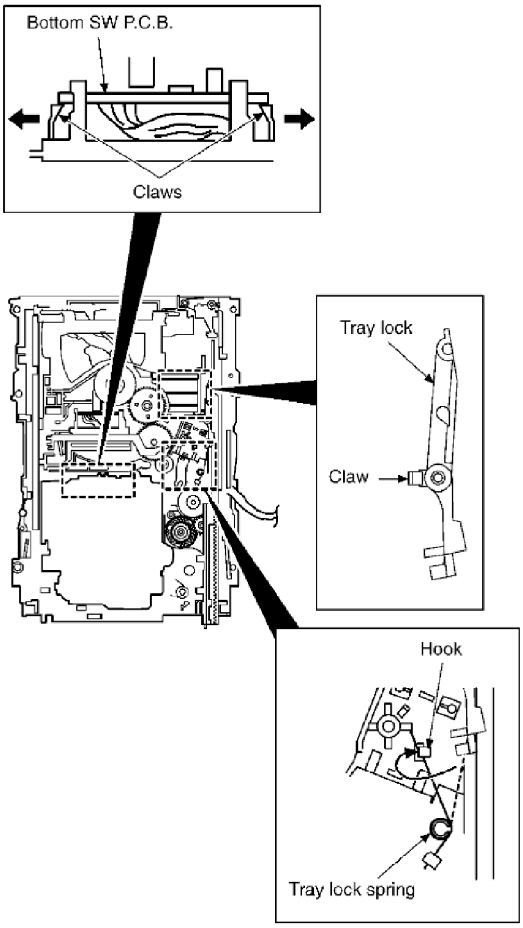
NOTE:

Take care not to lose the change gear spring.

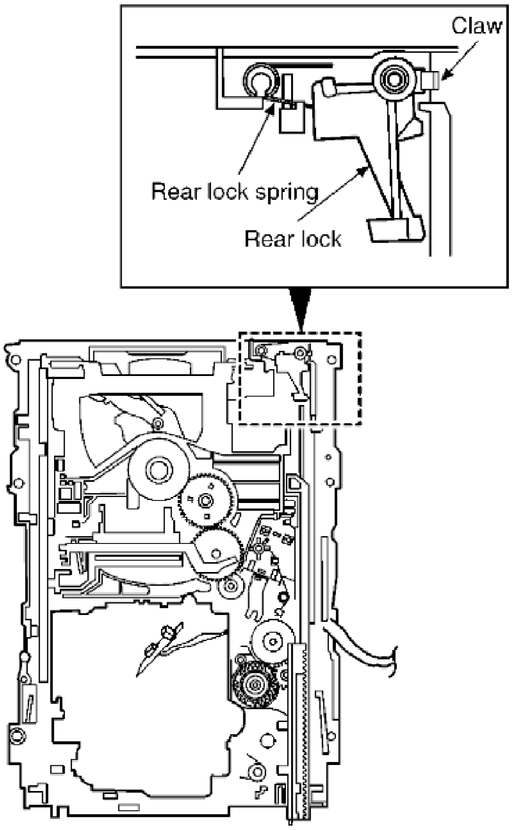
Step 4 Remove the pulley gear, change gear and UP/DOWN gear.


Change gear
Pulley gear
UP/DOWN gear

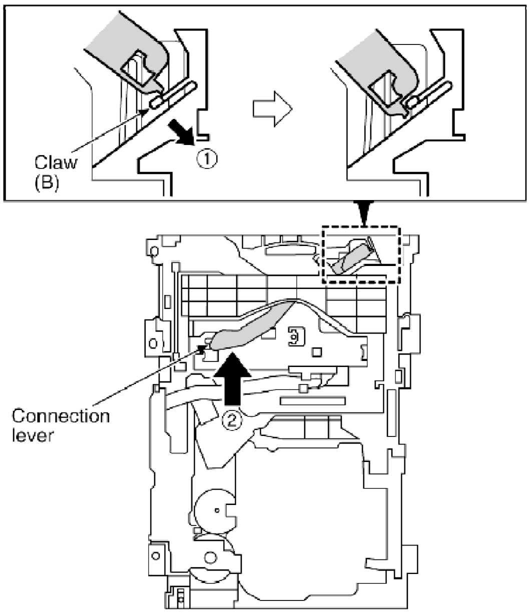
Step 5 Release the 2 claws, and then remove the bottom SW P.C.B..


Bottom SW P.C.B.
Claws
Tray lock
Claw
Hook
Tray lock spring

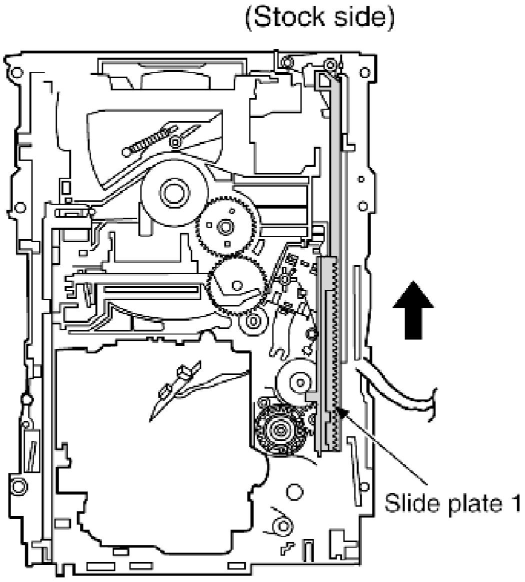
Step 6 Install the tray lock spring to hook temporary.
Step 7 Release the claw, and then remove the tray lock.
Step 8 Release the claw, and then remove the rear lock.


Claw
Rear lock spring
Rear lock

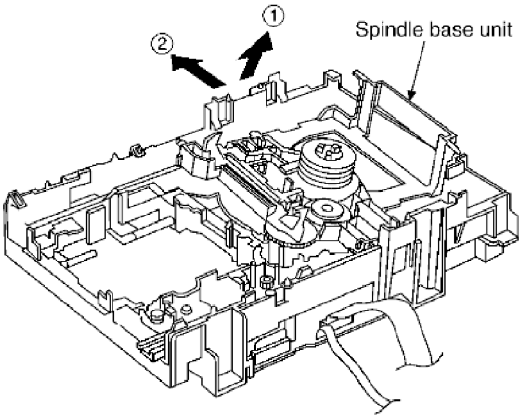
Step 9 Pressing the claw (B) in the direction of arrow (1), force the connection lever in the direction of arrow (2).

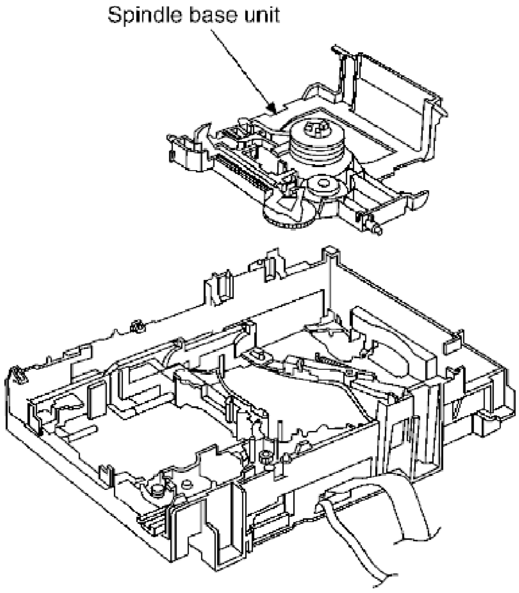

Claw
(B)
①
Connection
lever
②

Step 10 Move the slide plate 1 to the end of stock side.

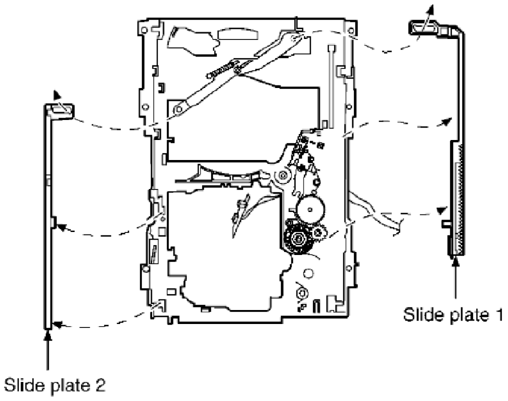

(Stock side)
Slide plate 1

Step 11 Lift up the left end of spindle base unit in the direction of arrow (1), and then remove the unit in the direction of arrow (2).

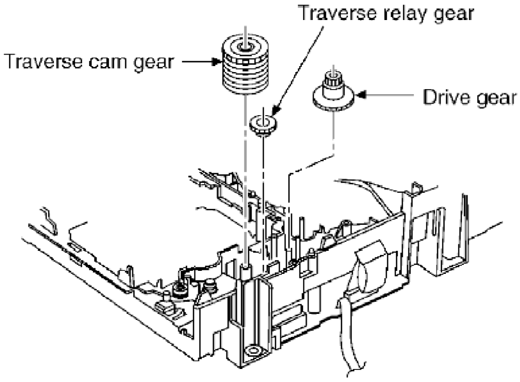

①
②
Spindle base unit


Spindle base unit

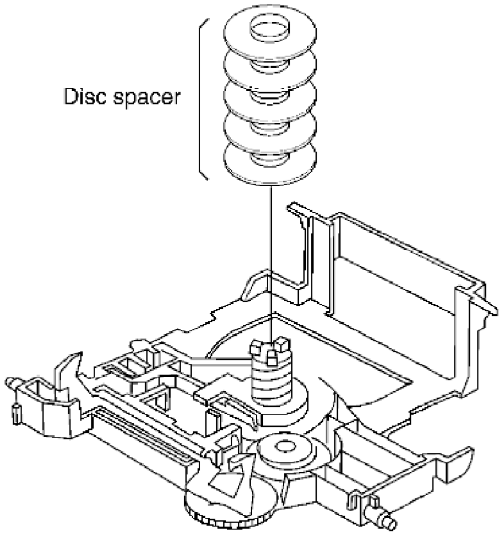
Step 12 Remove slide plate 1 and slide plate 2.


Slide plate 1
Slide plate 2

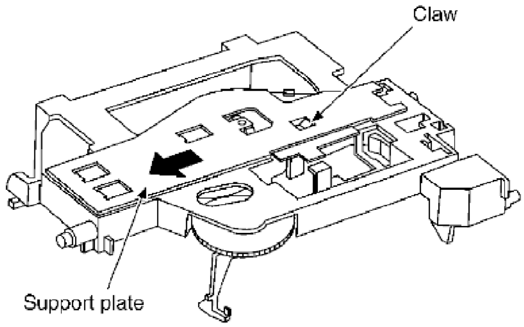
Step 13 Remove the traverse relay gear, traverse cam gear and drive gear.


Traverse relay gear
Traverse cam gear
Drive gear

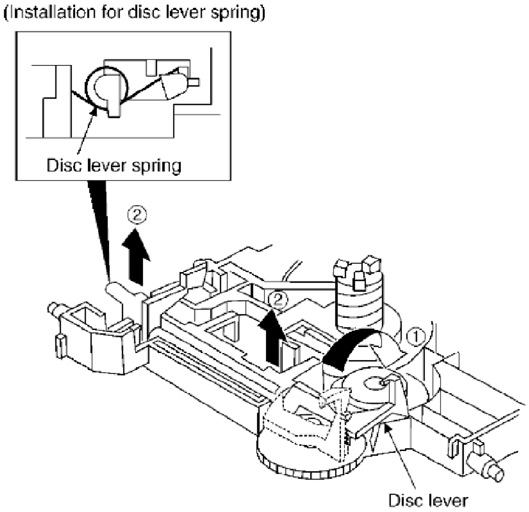
[Dissassembly/reassembly for the spindle base unit]
Step 1 Draw the 5 disc spacers.


Disc spacer

Step 2 Pushing the claw, slide the support plate in the direction of arrow, and then remove it.

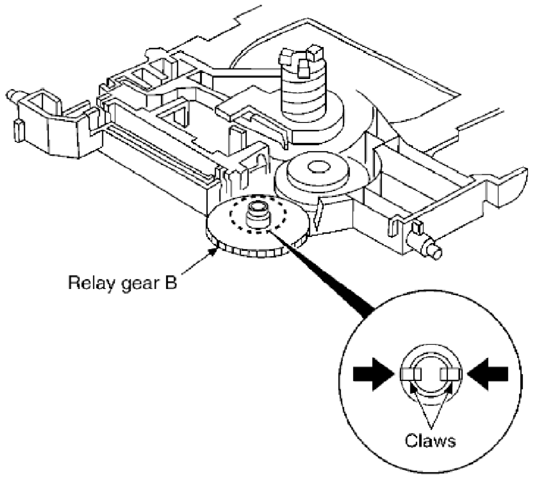

Claw
Support plate

Step 3 Rotate the disc lever in the direction of arrow (1), draw the disc lever.


(Installation for disc lever spring)
Disc lever spring
②
②
①
Disc lever

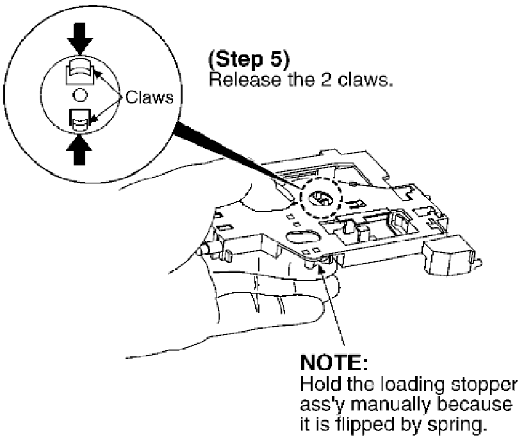
NOTE:

Take care not to lose the disc lever spring.


Relay gear B
Claws

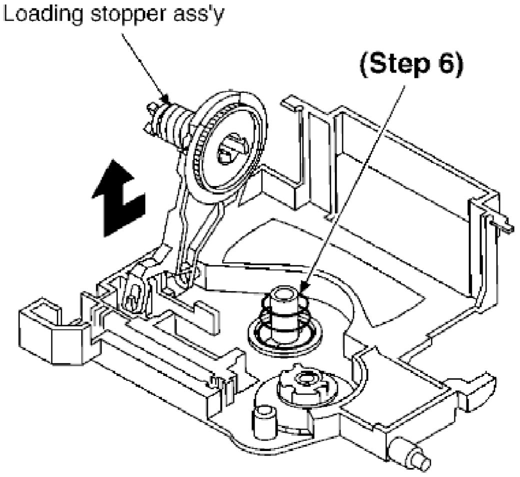
Step 4 Release the 2 claws, and then draw the relay gear B.

Step 5 Release the 2 claws as shown below.


Claws
(Step 5)
Release the 2 claws.
NOTE:
Hold the loading stopper ass'y manually because it is flipped by spring.

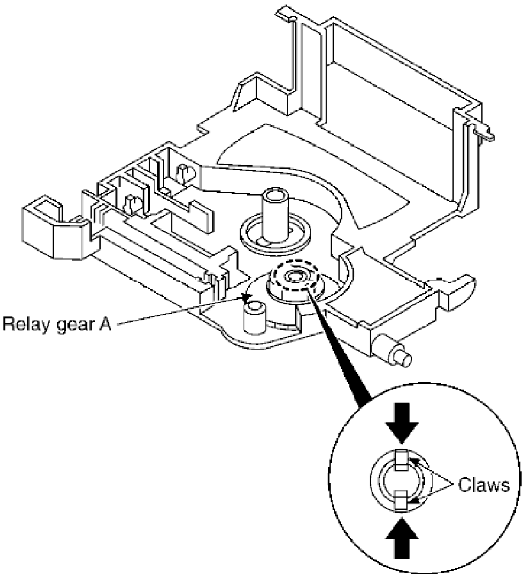
NOTE:

Hold the loading stopper ass’y manually bacause it is flipped by spring.


Loading stopper ass'y
(Step 6)

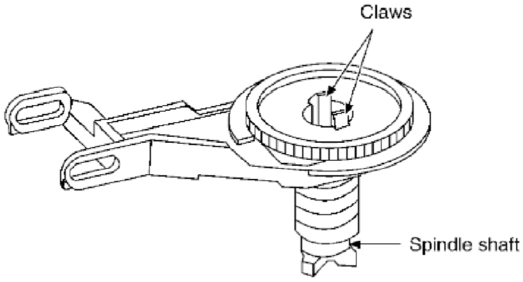
Step 6 Remove the cushion spring.

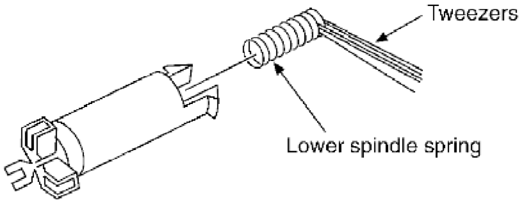
Step 7 Remove the loading stopper ass’y in the direction of arrow.


Relay gear A
Claws

Step 8 Release the 2 claws, and then remove the relay gear A.

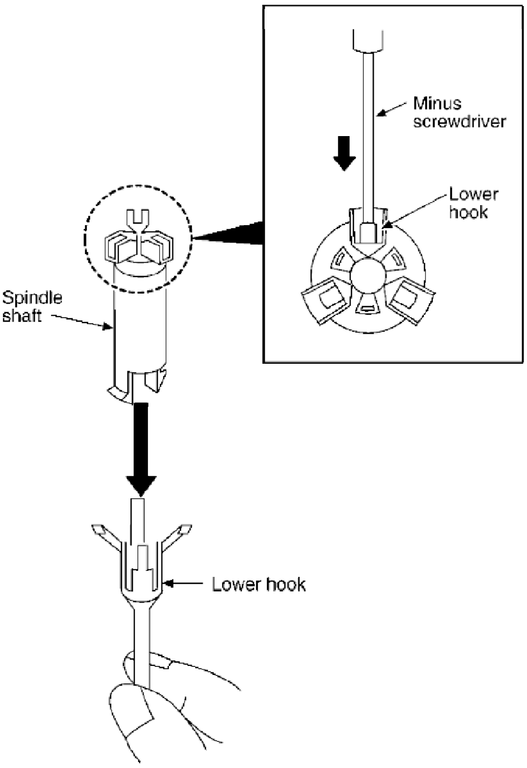
Step 9 Release the 2 claws, and then remove the spindle shaft.


Claws
Spindle shaft

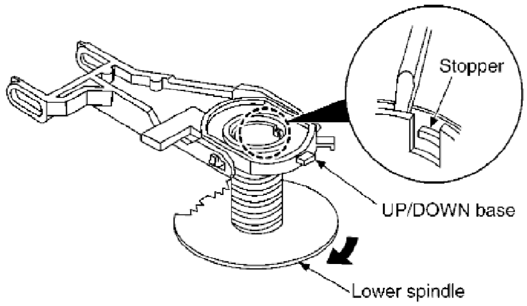

Tweezers
Lower spindle spring

Step 10 Remove the lower spindle spring with tweezers.

Step 11 Force the lower hook with thin tip of minus screwdriver.

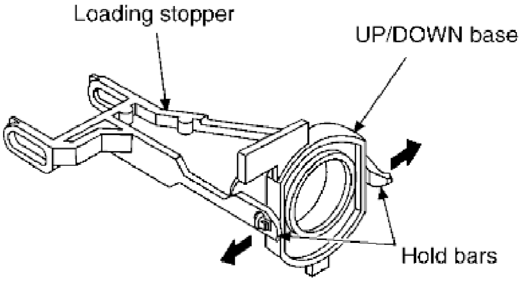

Minus
screwdriver
Lower
hook
Spindle
shaft
Lower hook

Step 12 Squeeze the shaft of lower hook, and then draw it.


Stopper
UP/DOWN base
Lower spindle

Step 13 Rotate the lower spindle in the direction of arrow until the lower spindle interferes with stopper.

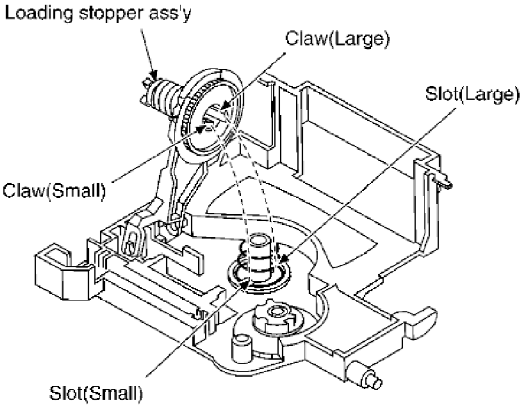
Step 14 Insert the thin tip of minus screwdriver between the lower spindle and UP/DOWN base, and then slacken the lower spindle to release the stopper. Then, rotate the lower spindle and remove it.


Loading stopper
UP/DOWN base
Hold bars

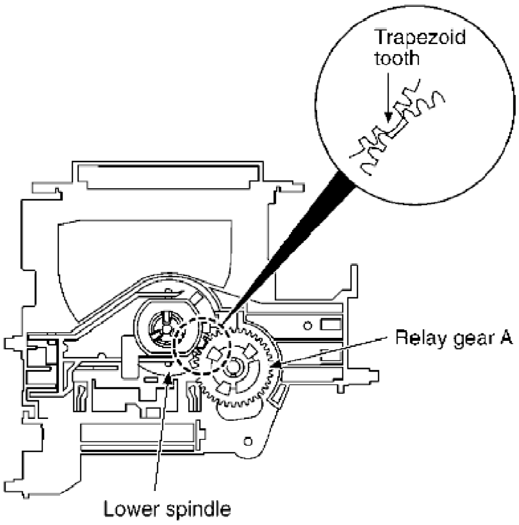
Step 15 Rotate the UP/DOWN base at a 90° angle. Then, spread the hold bars of loading stopper and remove the UP/DOWN base.

[Installation for loading stopper ass’y]

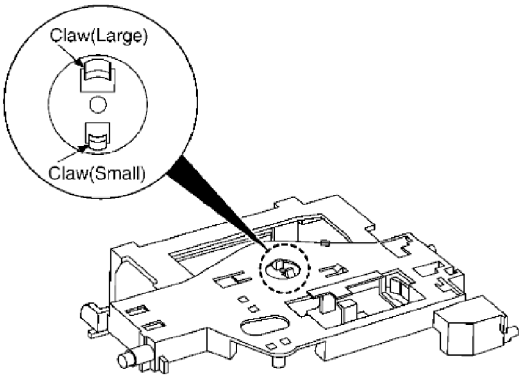
Step 1 Align the claw of loading stoppers ass’y with the slot of spindle base. (Caution should be exercised when alignment of claw due to the size of claws.)


Loading stopper ass'y
Claw(Large)
Slot(Large)
Claw(Small)
Slot(Small)

Step 2 Lower the loading stopper ass’y, and then align the lower spindle with the trapezoid tooth of relay gear A.


Trapezoid tooth
Relay gear A
Lower spindle

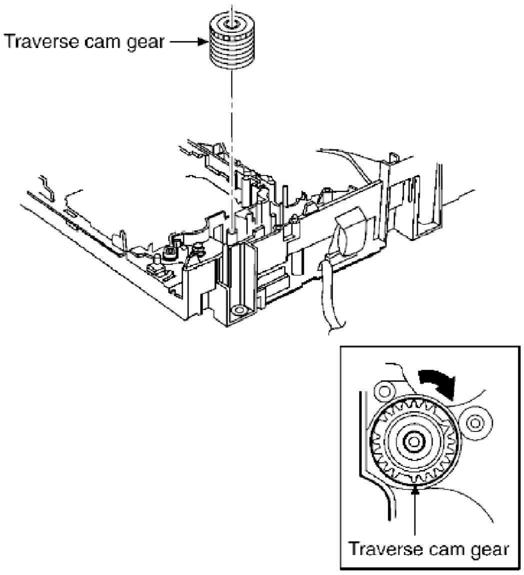
Step 3 Force the loading stopper ass'y, latch the claw firmly.


Claw(Large)
Claw(Small)

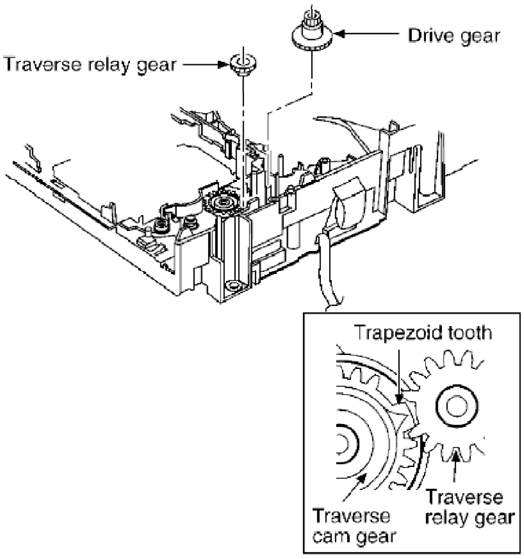
[Reassembly for mechanism base drive unit]

Step 1 Install the traverse cam gear.

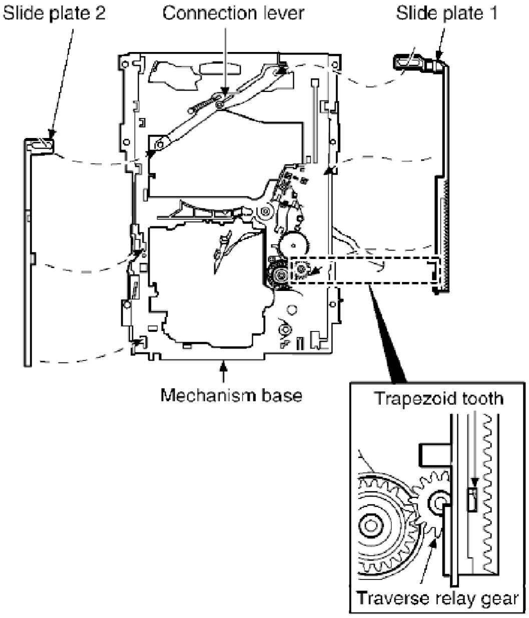
Step 2 Rotate the traverse cam gear to the direction of arrow.


Traverse cam gear
Traverse cam gear

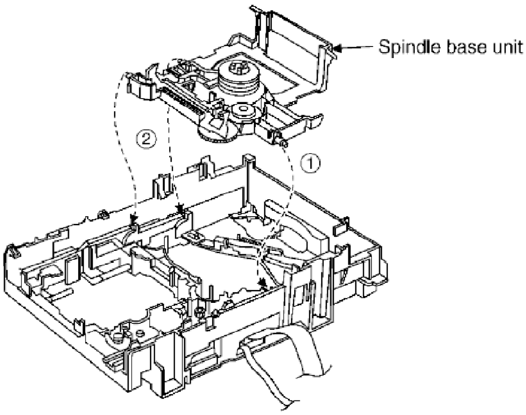
Step 3 Install the drive gear and traverse relay gear.


Drive gear
Traverse relay gear
Trapezoid tooth
Traverse relay gear
Traverse cam gear

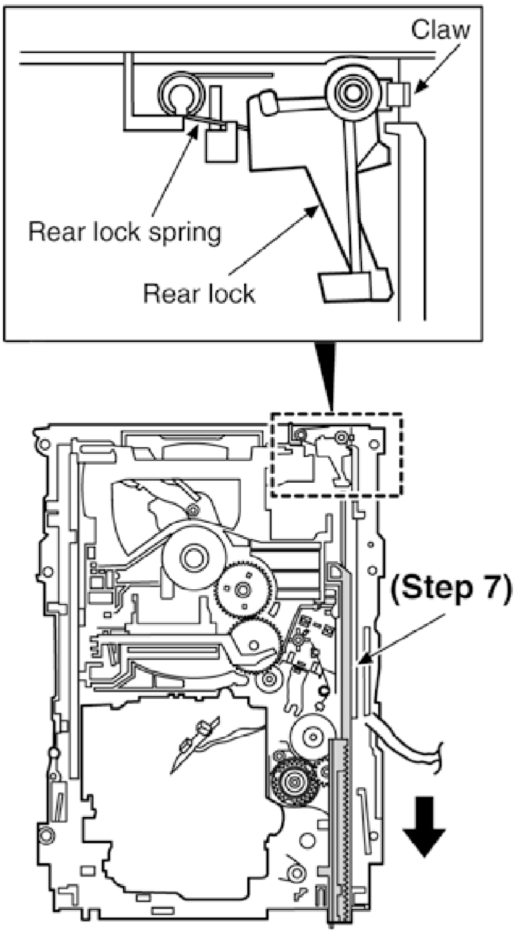
***When installing the traverse relay gear, align the trapezoid tooth of gear with tooth of traverse cam gear.**


Slide plate 2
Connection lever
Slide plate 1
Mechanism base
Trapezoid tooth
Traverse relay gear

Step 4 Install the slide plate 2 to the mechanism base, and then match to the connection lever.
Step 5 Install the slide plate 1 to the mechanism base, and then match to the connection leve and align the trapezoid tooth of traverse relay gear with the slide plate 1.

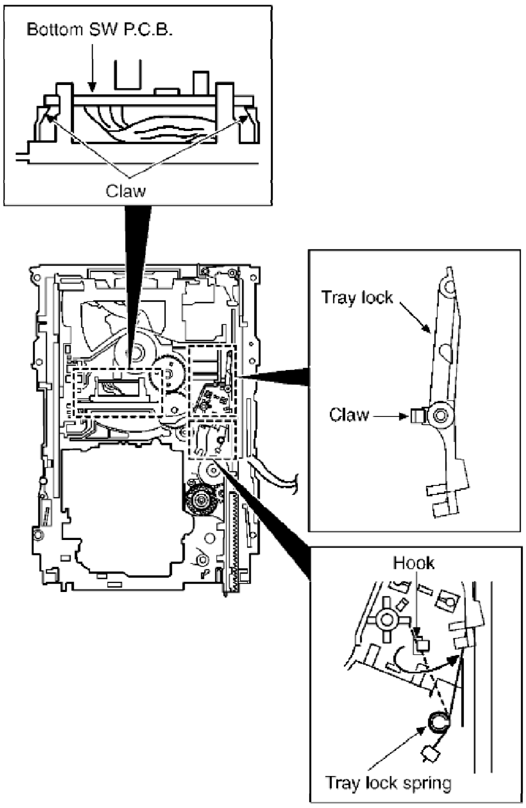

Spindle base unit
②
①

Step 6 Install the spindle base unit. (First, slide plate 1.)


Claw
Rear lock spring
Rear lock
(Step 7)

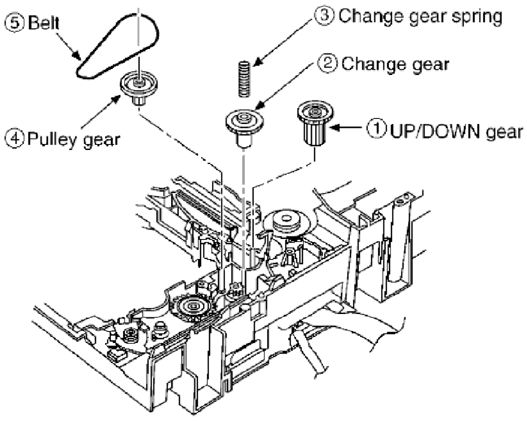
(Front side)

Step 7 Move the slide plate 1 to forward fully.
Step 8 Install the rear lock. (The claw should be latched.)
Step 9 Install the Spindle Position P.C.B.. (The claw should be latched.)
Step 10 Install the tray lock. (The claw should be latched.)

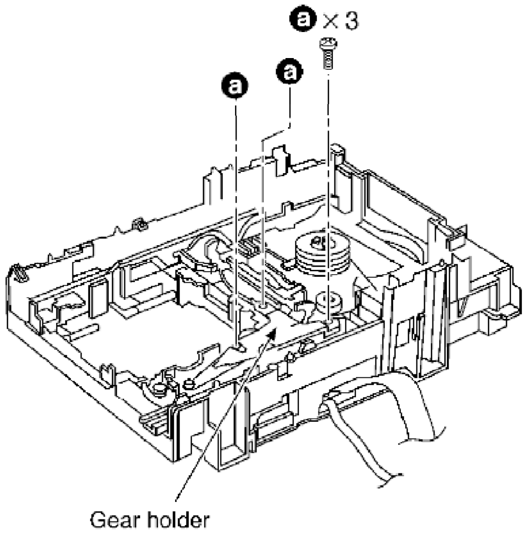

Bottom SW P.C.B.
Claw
Tray lock
Claw
Hook
Tray lock spring

Step 11 Remove the tray lock spring from hook,and then latch to the tray lock.

Step 12 Install the UP/DOWN gear, change gear, change gear spring, pulley gear and belt in the order of (1) - (5).


⑤Belt
③Change gear spring
②Change gear
①UP/DOWN gear
④Pulley gear

Step 13 Install the gear holder, and then tighten the screw (a).



Step 14 Install the tray base, traverse ass’y, mechanism cover and upper plate.
[Operation check after servicing]
Check the proper operation of following items with gear and hexagonal screwdriver.

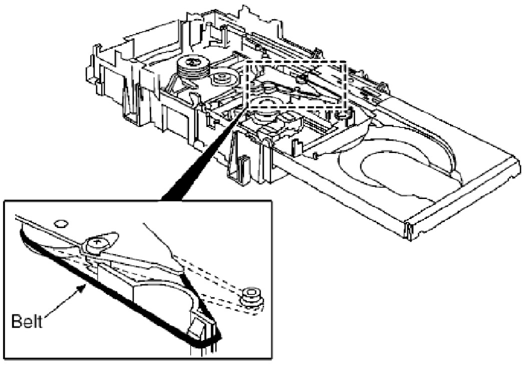
1. Open/close of tray base.

2. Moving the tray base to the stock side.

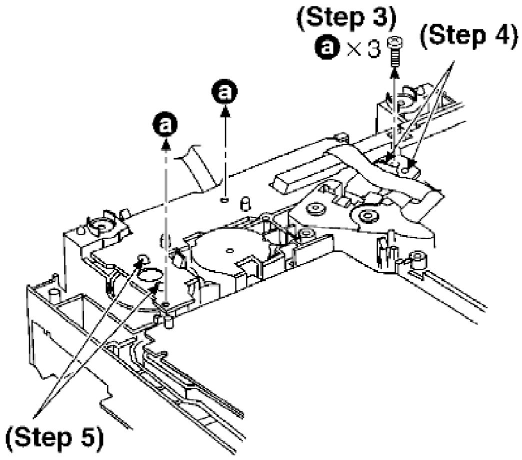
3. UP/DOWN operation of spindle base unit.

4. UP/DOWN operation of traverse ass’y.

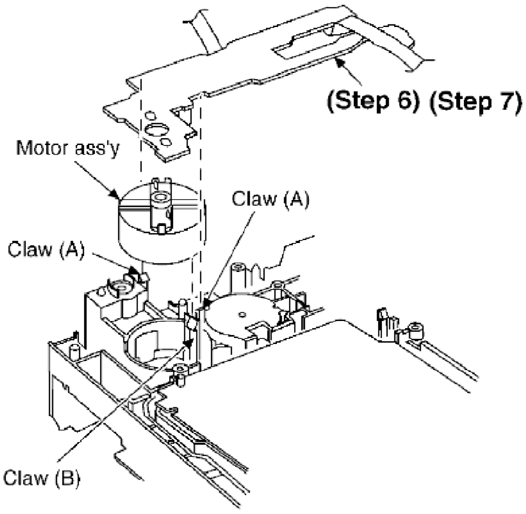
10.7.4. Replacement for the motor ass’y



Step 1 Install the belt temporarily.
NOTE:
Take care not apply the grease to the belt.
Step 2 Upset the CD loading unit.
Step 3 Remove 3 screws.


(Step 3)
a × 3
(Step 4)
a
a
(Step 5)

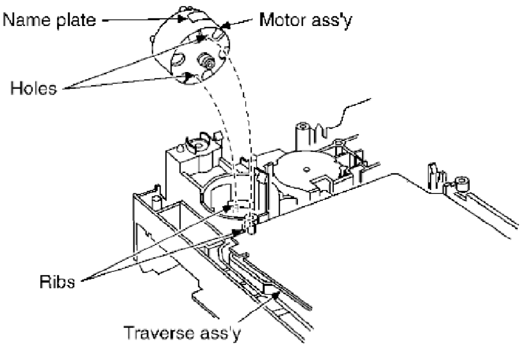
Step 4 Unsolder the plunger terminals (2 points).
Step 5 Unsolder the motor terminals (2 points).


(Step 6) (Step 7)
Motor ass'y
Claw (A)
Claw (A)
Claw (B)

Step 6 Release the 2 claws (A), and then remove the Motor P.C.B.
Step 7 Release the claw (B), and then remove the motor ass'y.
[Notice for motor ass'y installation]

1. Locate the name plate of motor to the traverse ass'y.

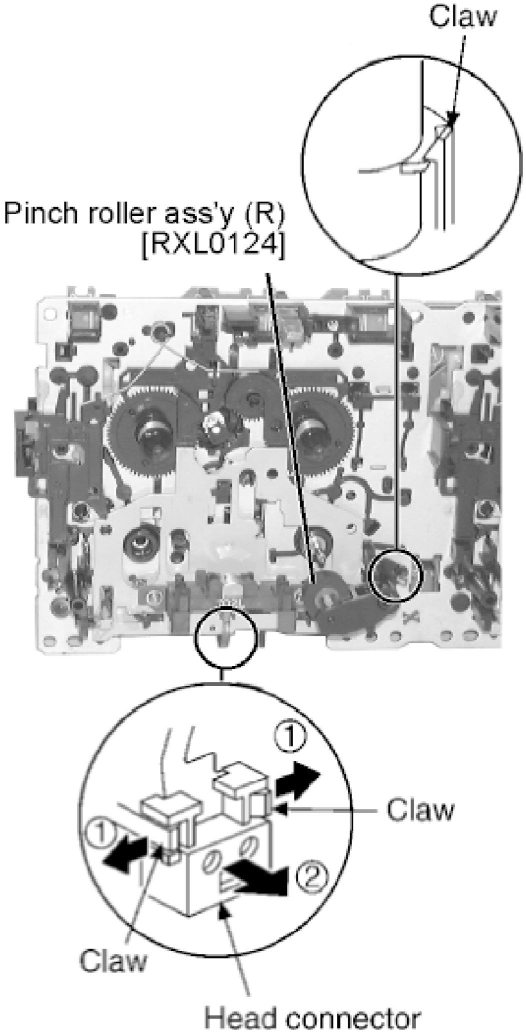
2. Align the hole of motor with the ribs.


Name plate
Motor ass'y
Holes
Ribs
Traverse ass'y

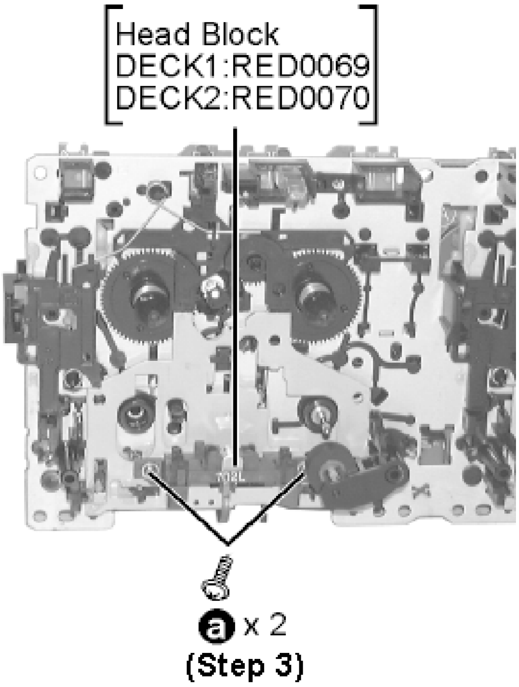
10.8. Replacement for the pinch roller ass'y and head block

- **Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet and Rear Panel**
- **Follow the (Step 1) - (Step 5) of Item 10.2.1 - Disassembly for CD Lid**
- **Follow the (Step 1) - (Step 2) of Item 10.3 - Disassembly of the CD Mechanism Unit**
- **Follow the (Step 1) of Item 10.4 - Disassembly the Main P.C.B. & Transformer P.C.B.**
- **Follow the (Step 1) - (Step 2) of Item 10.5 - Disassembly of the Panel P.C.B. & Tact Switch P.C.B.**
- **Follow the (Step 1) - (Step 5) of Item 10.6 - Disassembly for the Deck Mechanism Unit & Deck P.C.B.**

*** The mechanism as shown below is for DECK1. For the one of DECK 2, perform the same procedures.**



Step 1 Release the 2 claws, and then remove the pinch roller (R), (F).
Step 2 Release ther 2 claws, and then remove the head connector.

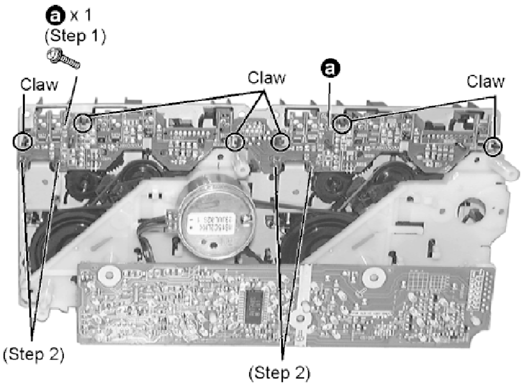


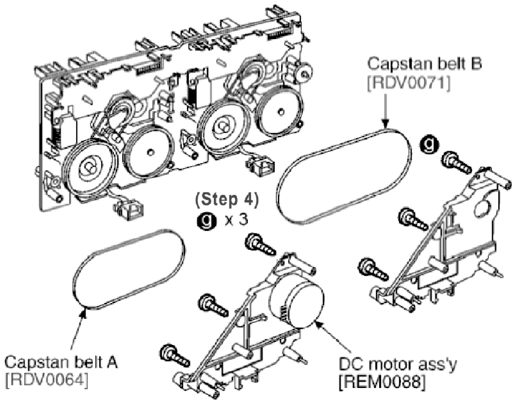
Step 3 Remove 2 screws.

10.9. Replacement for the Deck motor ass'y, capstan belt A, capstan belt B and winding belt

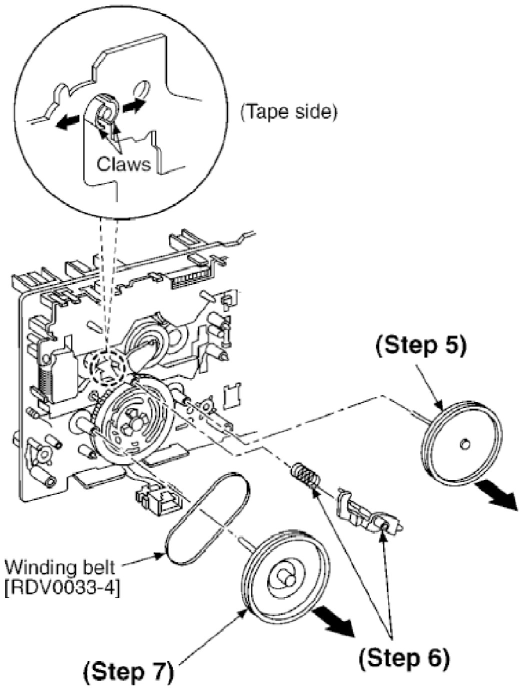
- **Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet and Rear Panel**
- **Follow the (Step 1) - (Step 5) of Item 10.2.1 - Disassembly for CD Lid**
- **Follow the (Step 1) - (Step 2) of Item 10.3 - Disassembly of the CD Mechanism Unit**
- **Follow the (Step 1) of Item 10.4 - Disassembly the Main P.C.B. & Transformer P.C.B.**
- **Follow the (Step 1) - (Step 2) of Item 10.5 - Disassembly of the Panel P.C.B. & Tact Switch P.C.B.**
- **Follow the (Step 1) - (Step 5) of Item 10.6 - Disassembly for the Deck Mechanism P.C.B.**

Step 1 Release the 2 claws, and then remove the head connector.
Step 2 De-solder plunger point.
Step 3 Remove the Deck Mechanism P.C.B.


ⓐ x 1
(Step 1)
Claw
Claw
ⓐ
Claw
(Step 2)
(Step 2)


Capstan belt B
[RDV0071]
ⓖ
(Step 4)
ⓖ x 3
Capstan belt A
[RDV0064]
DC motor ass'y
[REM0088]

Step 4 Remove 3 screws.


(Tape side)
Claws
(Step 5)
Winding belt
[RDV0033-4]
(Step 7)
(Step 6)

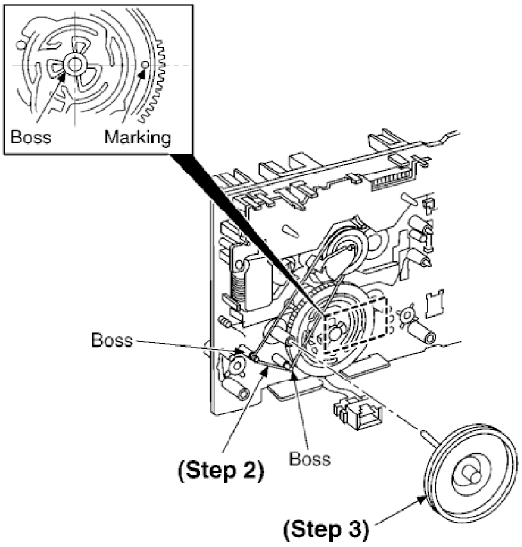
Step 5 Remove the flywheel R.

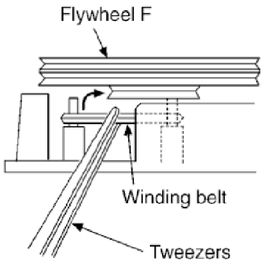
Step 6 Release the claw of tape side, and then remove the winding lever and spring.

Step 7 Remove the flywheel F.

[Installation of the belt]

Step 1 The boss and marking should be positioned horizontally.


Boss
Marking
Boss
(Step 2)
Boss
(Step 3)


Flywheel F
Winding belt
Tweezers

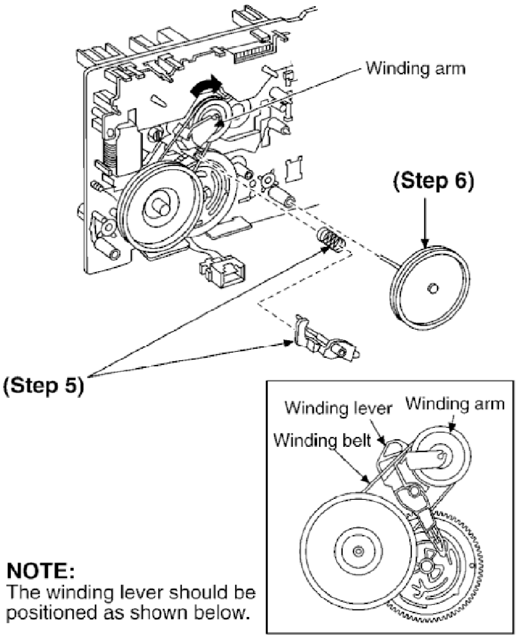
Step 2 Put the winding belt on the pulley temporarily.

Step 3 Install the flywheel F.

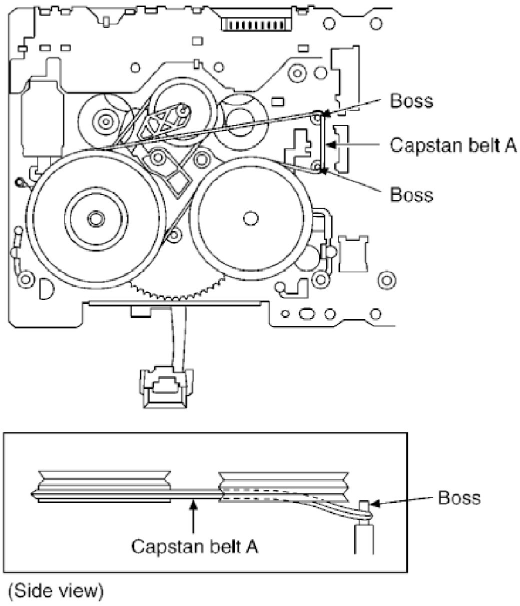
Step 4 Put the winding belt on the flywheel F.

Step 5 Install the winding lever and spring while pressing the winding arm in the direction of arrow.

Step 6 Install the flywheel R.

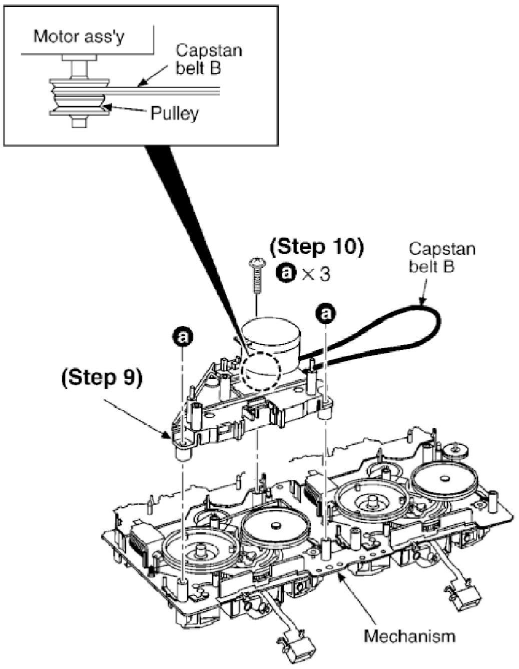

Winding arm
(Step 6)
(Step 5)
Winding lever
Winding arm
Winding belt
NOTE:
The winding lever should be positioned as shown below.

Step 7 Put the capstan belt A temporarily as shown below.


Boss
Capstan belt A
Boss
Boss
Capstan belt A
(Side view)

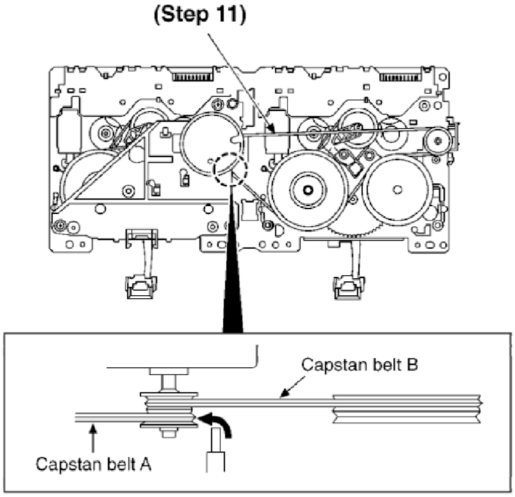
Step 8 Put the capstan belt B on the motor ass'y pulley.

Step 9 Install the sub chassis to the mechanism, and then tighten screws.


Motor ass'y
Capstan belt B
Pulley
(Step 10)
a × 3
Capstan belt B
a
a
(Step 9)
Mechanism

Step 10 Remove 3 screws.

Step 11 Put the capstan belt B as shown below.

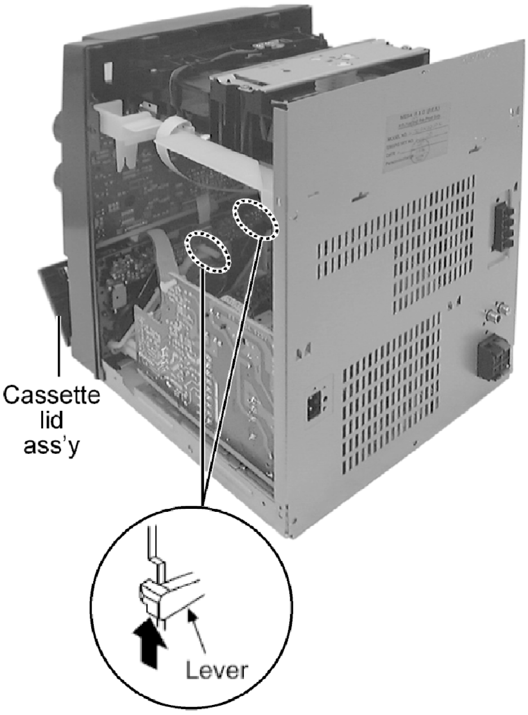

(Step 11)
Capstan belt B
Capstan belt A

Step 12 Put the capstan belt A on the motor ass’y pulley.

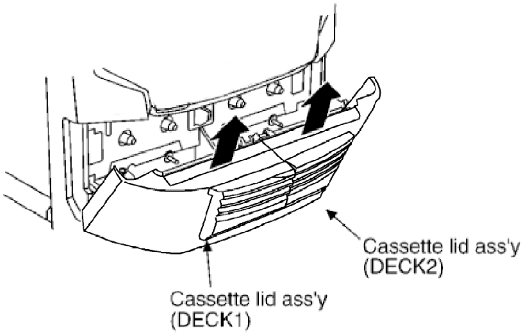
10.10. Replacement for the cassette lid ass’y

- Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet and Rear Panel

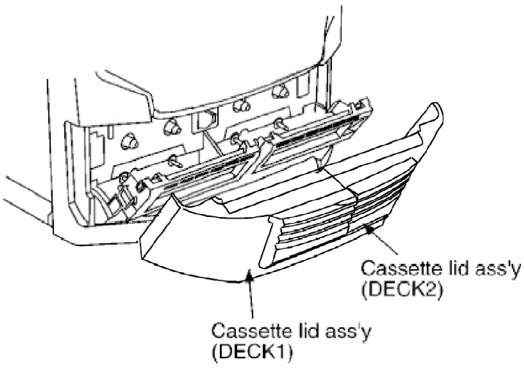
Step 1 Push the lever upward, open the cassette lid ass’y. (For DECK1 and DECK2)


Cassette lid ass’y
Lever

Step 2 Lift up the cassette lid ass’y in the direction of arrow. (For DECK1 and DECK2).


Cassette lid ass'y
(DECK2)
Cassette lid ass'y
(DECK1)

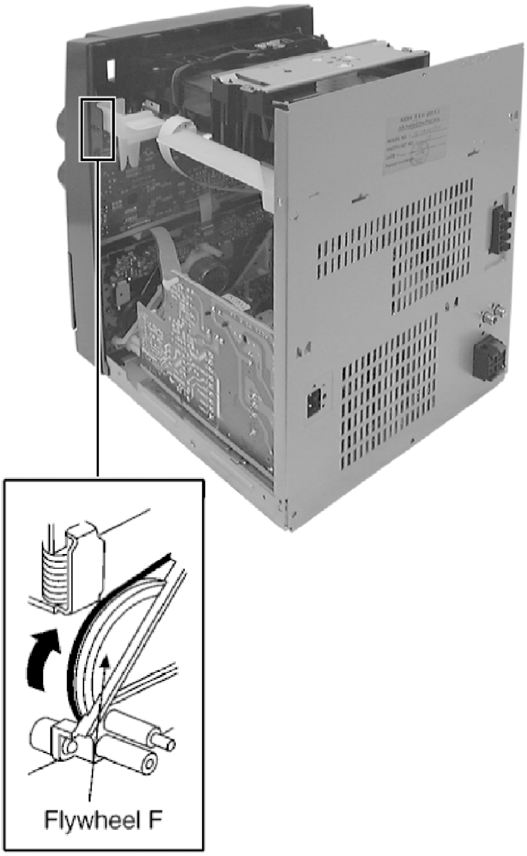
Step 3 Remove the cassette lid ass'y. (For DECK1 and DECK2).


Cassette lid ass'y
(DECK2)
Cassette lid ass'y
(DECK1)

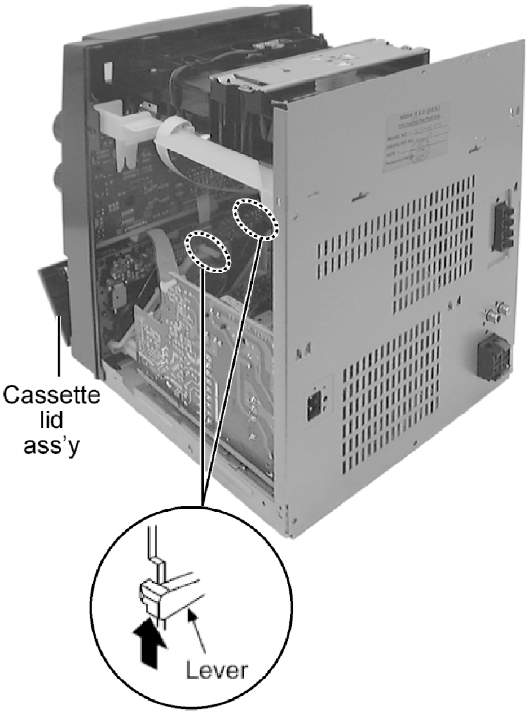
10.11. Counter- measure for tape trouble

- Follow the (Step 1) - (Step 2) of Item 10.2 - Disassembly of Top Cabinet and Rear Panel

Step 1 If a cassette tape cannot be removed from the deck since the tape is caught by the capstan or pinch roller during playback or recording, rotate the flywheel F in the direction of the arrow to remove the tape.



Step 2 Push the lever upward and open the cassette lid ass’y. Take the cassette tape off.


Cassette lid ass’y
Lever

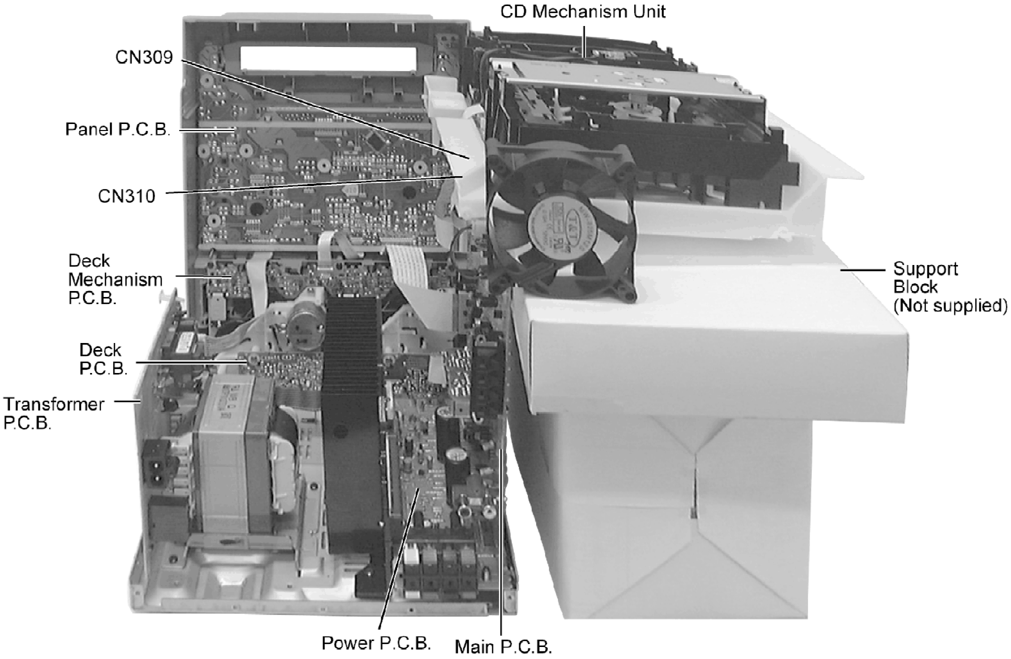
11. Service Position

11.1. Checking Procedure

Note:
For the disassembling procedure, see Section 10.

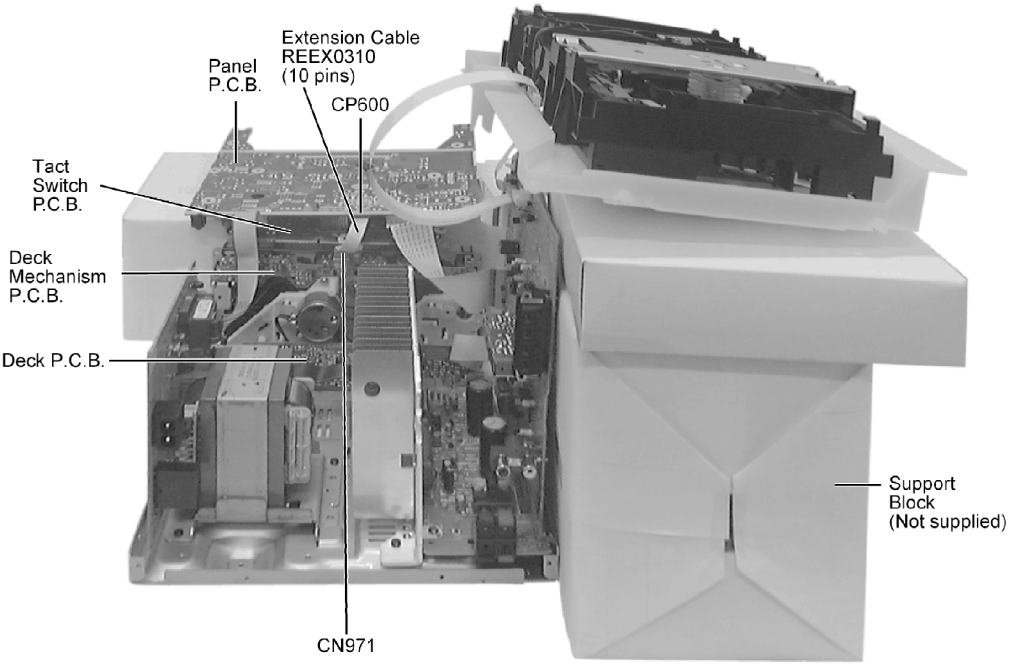
11.2. Checking the Main P.C.B., Power P.C.B. and Transformer P.C.B.

1. **Disassembly of Top Cabinet and Rear Panel.**
2. **Disassembly of CD Lid.**
3. **Disassembly CD Mechanism Unit.**
4. **Connect FFC board (CN309 & CN310) from CD Mechanism Unit.**


CD Mechanism Unit
CN309
Panel P.C.B.
CN310
Deck Mechanism P.C.B.
Deck P.C.B.
Transformer P.C.B.
Support Block (Not supplied)
Power P.C.B.
Main P.C.B.

11.3. Checking the Panel, Tact Switch, Deck & Deck Mechanism P.C.B.

1. **Remove Top Cabinet and Rear Panel.**
2. **Remove CD Lid.**
3. **Remove CD Mechanism Unit.**
4. **Remove volume knob at front panel.**
5. **Remove Panel P.C.B. & Tact Switch P.C.B.**
6. **Remove Deck Mechanism Unit.**
7. **Use the extension cable (REEX0310 - 10 Pins) to reconnect (CP600) Panel P.C.B. and (CN971) Deck Mechanism P.C.B.**


Extension Cable
REEX0310
(10 pins)
Panel
P.C.B.
CP600
Tact
Switch
P.C.B.
Deck
Mechanism
P.C.B.
Deck P.C.B.
Support
Block
(Not supplied)
CN971

Service Tools	
Extension FFC Panewl P.C.B. - Deck Mechanism P.C.B.	**REEX0310 (10 Pins)**

12. Description of Error Code

12.1. Abnormality detection for Deck Mechanism block

No.	Abnormal Items	Error Display	Method of Detection
1	MODE SW abnormal	H01	Normal operation during mecha transition, MOD abnormal is memorized. The content of abnorm can be confirmed in the abnormal detection mo explained in the later section.
2	REC INH SW abnormal	H02	The contect of abnormality can be confirmed in abnormal detection mode explained in the later
3	HALF SW abnormal	H03	The contect of abnormality can be confirmed in abnormal detection mode explained in the later
4	Reel pulse abnormal	F01	The contect of abnormality can be confirmed in abnormal detection mode explained in the later

12.2. Abnormality detection for CD/Changer block

No.	Abnormal Items	Error Display	Method of Detection
1	REST SW abnormal	F15	Under normal operation (Self-Diagnostic Mode inclusive), this error occurs when the REST SV not detected within the specified time and shal memorized.
2	Transmission error between CD servo LSI and micon	F26	Under normal operation (Self-Diagnostic Mode inclusive), this error occurs when the selectior to CD and SENSE=’H’ is detected and SENSE= not detected within a fail safe time (20ms) after command transmission was sent.
3	CLAMP SW abnormal	F16	Refer to CR20 control specification section 5-2 [ERROR CODE] table M-0A error is detected.
4	BOTTOM SW abnormal	F17	Refer to CR20 control specification section 5-2 [ERROR CODE] table M-09 error is detected.
5	POSITION SW abnormal	F27	Refer tp CR20 control specification section 5-2 [ERROR CODE] table M-05 ~ M-08 error is dete
6	SW1 abnormal	F28	Refer to CR20 control specification section 5-2 [ERROR CODE] table M-02 ~ M-08 error is dete
7	SW2 abnormal	F29	Refer to CR20 control specification section 5-2 [ERROR CODE] table M-02 ~ M-08 error is dete
8	OPEN SW abnormal	H15	Refer to CR20 control specification section 5-2 [ERROR CODE] table M-01 error is detected.

12.3. Power supply related error detection

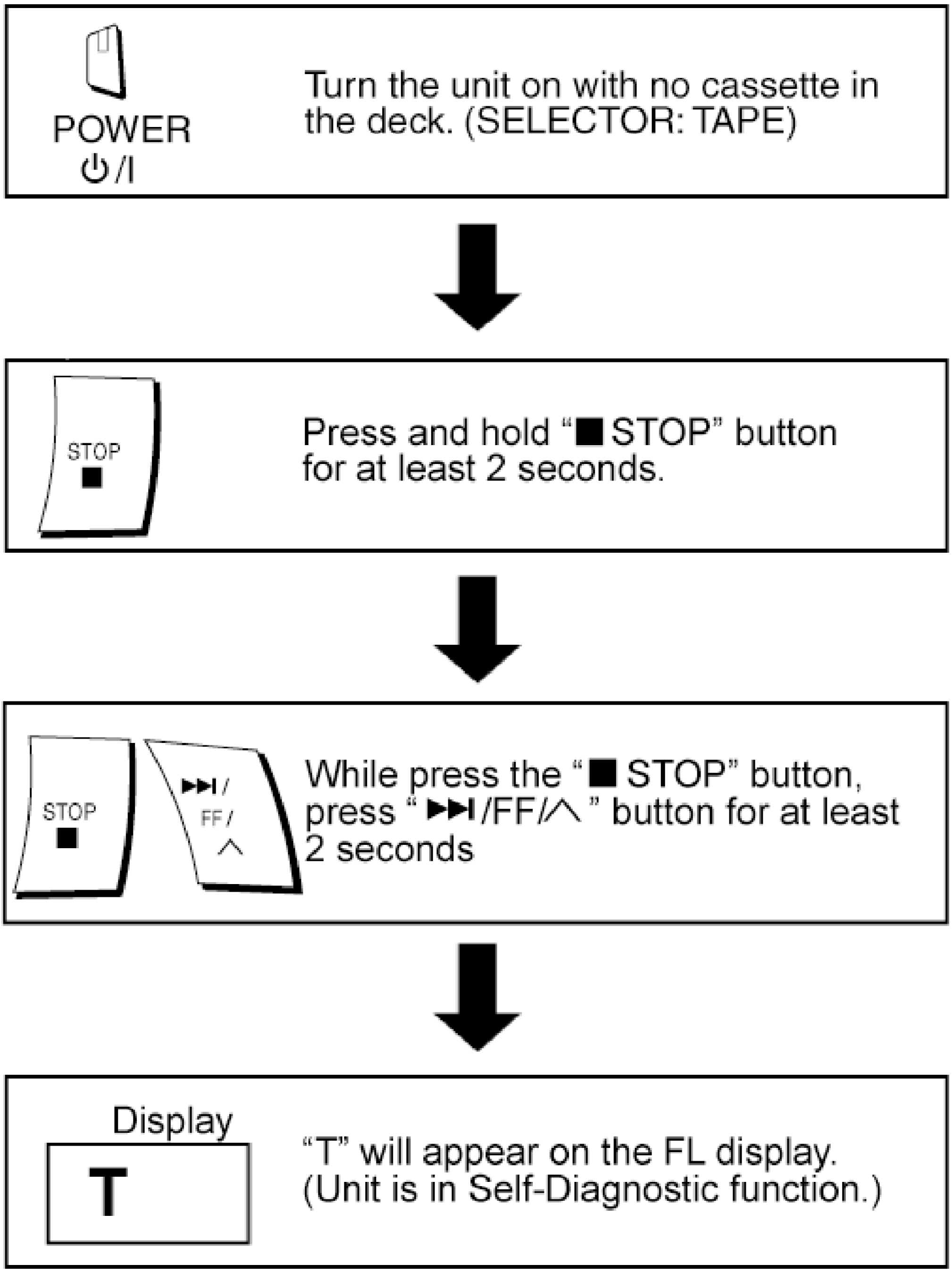
No.	Abnormal Items	Error Display	Method of Detection
1	POWER AMP output abnormal	F61	During normal operation, if DCDET becomes ‘L normal POWER OFF process shall not be exec PCNT shall be switched to ‘L’ immediately. GO shall not be displayed and the error display F6 displayed instead. 2 seconds after the F61 display, ECONO shall ‘L’ and FL display shall be turned off. The error content shall be memorized when the abnormality occurs and can be displayed in the mecha self-diagnostic mode described later.

13. Self-Diagnostic Function

13.1. Self-diagnostic display

This unit is equipped with a self-diagnostic display function which, if a problem occurs, will display an error code corresponding to the problem.
Use this function when performing maintenance on the unit.

13.2. How to enter the Self-Diagnostic Function



Turn the unit on with no cassette in the deck. (SELECTOR: TAPE)

Press and hold “■ STOP” button for at least 2 seconds.

While press the “■ STOP” button, press “ ▶▶I /FF/⋀ ” button for at least 2 seconds

“T” will appear on the FL display. (Unit is in Self-Diagnostic function.)

13.3. Cassette Mechanism Test (For error code H01, H02, H03, F01, F02)

1. Press “TAPE, DECK 1/2” to select Deck 2.

2. Load a cassette tape with the erasure prevention tab, remove from left side only and close the cassette holder.

3. Press “FAST FORWARD MEMORY” (Tape will be stop after 2 seconds)

4. Load a cassette tape with the erasure prevention tab, remove from right side only and close the cassette holder.
5. Press “REVERSE FM MODE/BP” (Tape will be stop after 2 seconds)
6. Load a pre-recorded tape with both side record tabs intact and close the cassette holder.
7. Press “PLAY/TUNE/TIME ADJ UP” (After TPS function, tape will stop automatically)
8. Press “REC/STOP” (Tape will not move)
9. Press “STOP/TUNE MODE” to indicate Error code.

   - If several problem exist, error code will change each time when “ ■ /STOP” is pressed.
     (e.g. H01 → H03 → F01 .....etc.)

10. Press “TAPE, DECK 1/2” to select Deck 1.
11. Repeat step 2 to 9 to test Deck 1. (Tape Deck 1 will not check H02 because of no recording function)

13.4. CD Mechanism Test (F15, F26, F16, F17, F27, F28, F29, H15)

1. Press “CD”.
2. Press “OPEN/CLOSE (1)” and place a CD.
3. Press “OPEN/CLOSE (1)” to close the tray.
4. Press “OPEN/CLOSE (5)” and wait until the tray is open.
5. Press “OPEN/CLOSE (1)” and remove the CD.
6. Press “OPEN/CLOSE (1)” to close the tray.
7. Press “ ■ /STOP” to indicate Error Code.

   - If several problem exist, error code will change each time when “ ■ /STOP” is pressed. (e.g. F15 → F26 → F16 ....etc).

13.5. To clear all Error code

1. Press “STOP/TUNE MODE” button for 5 seconds.
2. FL indicator shows “CLEAR” for 1 second and change to “T”.

13.6. How to get out from Self-Diagnostic function

1. Press “Power” button OFF.

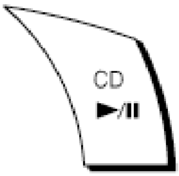
13.7. Power Amplifier Failure (F61)

1. When power amplifier fail, F61 will indicate automatically.

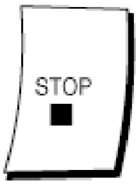
14. CD Test Mode Function

This CD test mode is provided to check CD unit without connecting to changer loading mechanism. This mode shall operate CD PLAY with CD unit being connected only and CD Automatic Alignment result is shown on FL display.

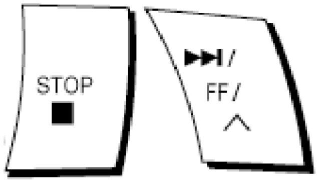
14.1. How to set CD test mode



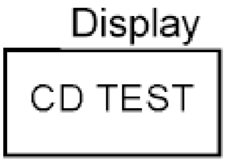
Press CD.



Press and hold "■STOP" button for at least 2 seconds.



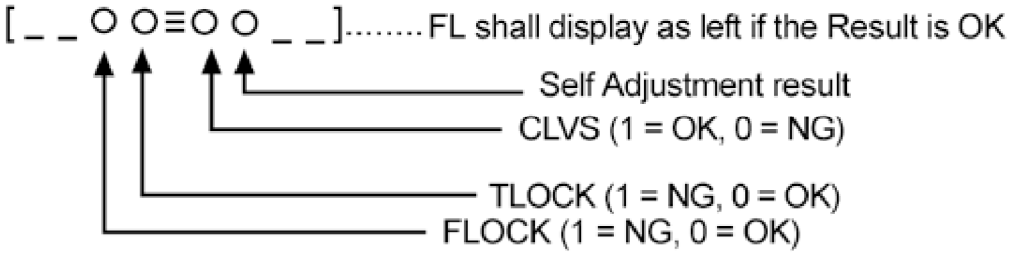
While press the "■ STOP" button, press "►►I/FF/^" button for at least 2 seconds


Display
CD TEST

"CD TEST" will appear on the FL display.
(Unit is in CD test mode.)

14.2. CD Automatically Adjustment result indication

Under CD test mode, pressing the numeric key '0' on the remote controller will display the auto adjustment result. FLOCK, TLOCK and CLVS status shall be shown as below:


[_ _ O O≡O O _ _]........FL shall display as left if the Result is OK
Self Adjustment result
CLVS (1 = OK, 0 = NG)
TLOCK (1 = NG, 0 = OK)
FLOCK (1 = NG, 0 = OK)

During the above display, executing CD PLAY will display auto adjustment result for CD PLAY mode.

15. Measurements and Adjustments

15.1. Cassette Deck Section

- Measurement Condition

- Make sure head, capstan and press roller are clean.

- Judgeable room temperature 20 ± 5 °C (68 ± 9°F)

- Measuring instrument

- EVM (DC Electronic voltmeter)

- Digital frequency counter

- Test Tape

- Tape speed gain adjustment (3 kHz, -10 dB); QZZCWAT

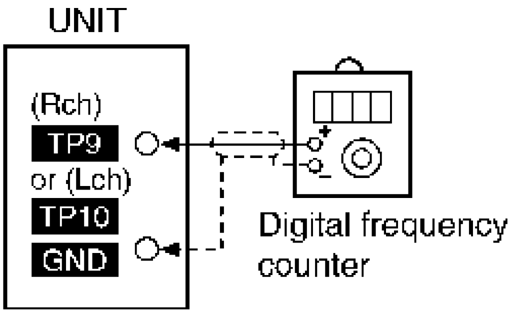
15.1.1. Tape Speed Adjustment (Deck 1/2)

1. Set the tape edit button to “NORMAL” position.
2. Insert the test tape (QZZCWAT) to DECK 2 and playback (FWD side) the middle portion of it.
3. Adjust Motor VR (DECK 2) for the output value shown below.

Adjustment target: 2940 ~ 3060 Hz (NORMAL speed)

4. After alignment, assure that the output frequency of the DECK 1 FWD are within ±60 Hz of the value of the output frequency of DECK 2 FWD.

Fig.1



15.1.2. Bias and Erase Voltage Check

1. Set the unit “AUX” position.
2. Insert the Normal blank tape (QZZCRA) into DECK 2 and the unit

to “REC” mode (use “ ● REC/STOP” key).

3. Measure and make sure that the output is within the standard value.

Bias voltage for Deck 2	14±4mV (Normal)
Erase voltage for Deck 2	80mV (Normal)

Fig.2

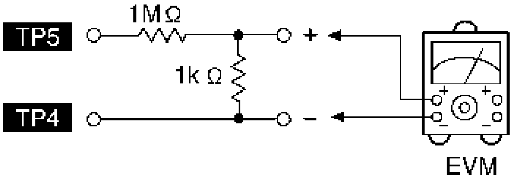
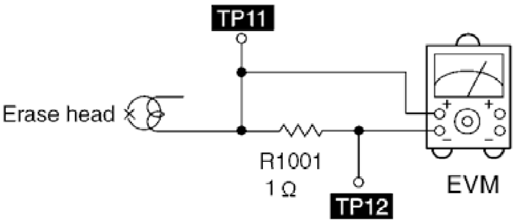

1MΩ
TP5
1kΩ
TP4
+
−
EVM

Fig.3


TP11
Erase head
R1001
1Ω
TP12
EVM

15.1.3. Bias Frequency Adjustment (Deck 1/2)

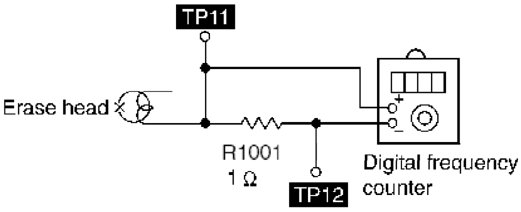
1. Set the unit to “AUX” position.

2. Insert the Normal blank tape (QZZCRA) into DECK 2 and set the unit to “REC” mode (● use “REC/STOP” key).

3. Adjust L1002 so that the output frequency is within the standard value.

Standard Value: 97 ±8 kHz

Fig.4


TP11
Erase head
R1001
1Ω
TP12
Digital frequency counter

15.2. Tuner Section

15.2.1. AM-IF Alignment

1. Connect the instrument as shown in Fig.5.

2. Set the unit to AM mode.
3. Apply signal as shown in Fig. 5 from AM-SG.
4. Adjust Z102 so that the output frequency is maximized in Fig. 6.

Fig.5

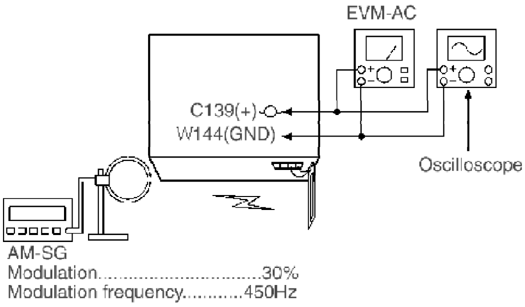
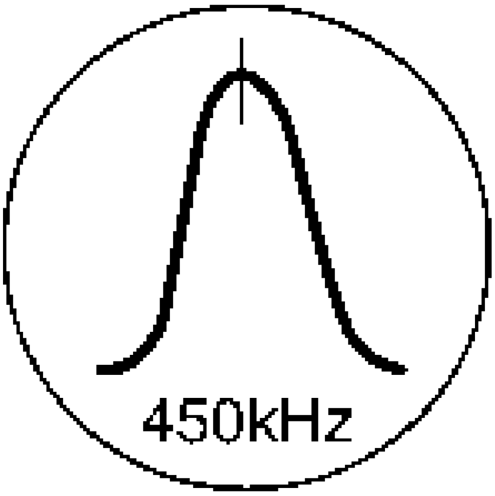

EVM-AC
C139(+)
W144(GND)
Oscilloscope
AM-SG
Modulation...............................30%
Modulation frequency...........450Hz

Fig.6



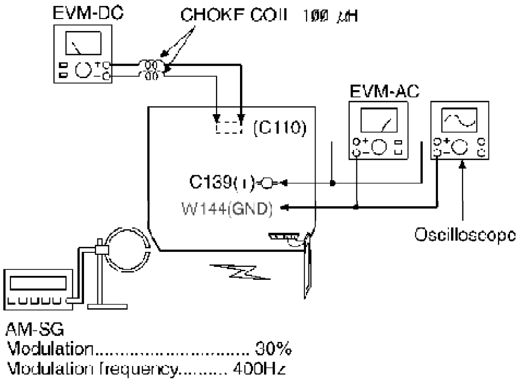
15.2.2. AM RF Adjustment

1. Connect the instrument as shown in Fig. 7.
2. Set the unit to AM mode.
3. Set AM-SG to 520kHz.
4. Receive 520kHz in the unit.
5. Adjust Z101 (OSC) so that the EVM-AC is maximized.
6. Set AM-SG to 600Hz.
7. Receive 600Hz in the unit.
8. Adjust Z101 (ANT) so that the EVM-SG is maximized.
9. Set AM-SG to 520kHz.

10. Receive 520kHz in the unit.

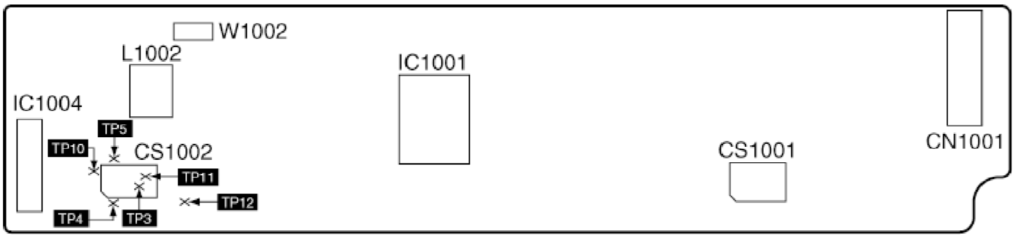
11. Adjust Z101 (OSC) so that the EVM-DC value is with 1.1±0.5V.

Fig.7

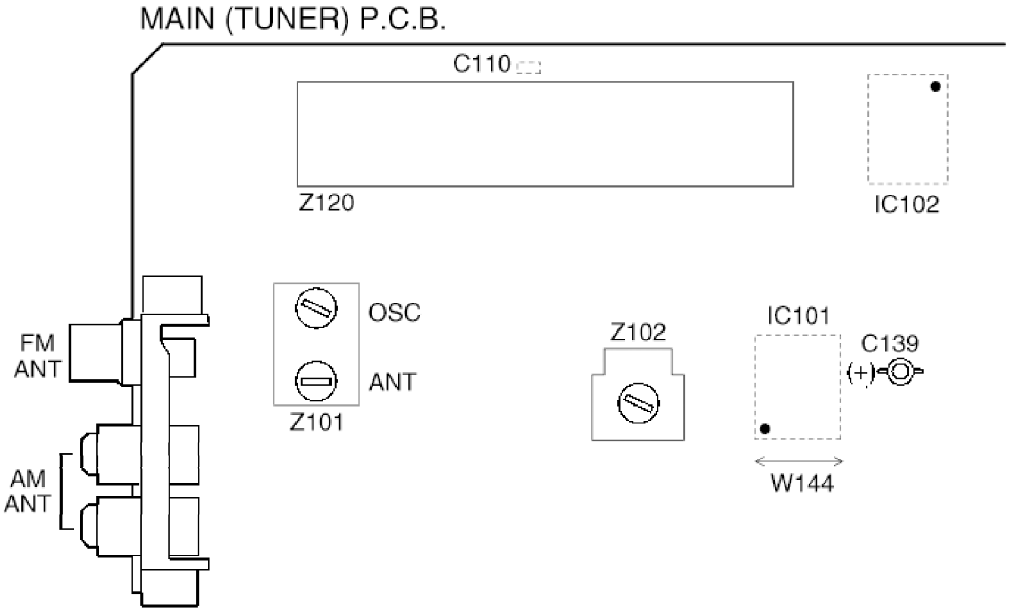

EVM-DC
CHOKE COIL 100 μH
EVM-AC
(C110)
C139(+)
W144(GND)
Oscilloscope
AM-SG
Modulation............................... 30%
Modulation frequency......... 400Hz

15.3. Alignment Points

15.3.1. Cassette Deck Section


W1002
L1002
IC1004
IC1001
TP5
TP10
CS1002
TP11
TP12
TP4
TP3
CS1001
CN1001

15.3.2. Adjustment Point


MAIN (TUNER) P.C.B.
C110
Z120
IC102
FM ANT
AM ANT
OSC
ANT
Z101
Z102
IC101
C139
(+)
W144

16. Block Diagram

17. Schematic Diagram

(All schematic diagrams may be modified at any time with the development of the new technology)

Note:

SW1
: Push switch

SW2
: Push switch

SW3
: Open switch

SW4
: CD switch

SW5
: Load switch

S601
: Open/ Close switch

S602
: CD 1 switch

S603
: CD 2 switch

S604
: CD 3 switch

S605
: CD 4 switch

S606
: CD 5 switch

S612
: Power switch

S613
: SSEQ switch

S614
: Preset switch

S615
: Record switch

S616
: Deck 1/2 switch

S701
: Rest switch

S901
: Rew switch

S902
: Tuner switch

S903
: CD switch

S904
: FF switch

S905
: Stop switch

S906
: Deck 2 open switch

S907
: Tape switch

S908
: AUX switch

S909
: Deck 1 open switch

S910
: Display switch

S951
: Mode switch

S952
: Half switch

S971
: Mode switch

S972

: Half switch

S975

: Recinh_F switch

VR600

: VR Volume Jog

- The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis. Accordingly, there may arise some error in voltage values and waveformsdepending upon the internal impedance of the tester or the measuring unit.

No mark : Playback **<< >> : Rec** **< > : FM**
(( )) : CD

- Importance safety notice :
Components identified by ⚠ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. Whenreplacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

Caution !

IC, LSI and VLSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care during repair.

- **Cover the parts boxes made of plastics with aluminium foil.**
- **Put a conductive mat on the work table.**
- **Ground the soldering iron.**
- **Do not touch the pins of IC, LSI or VLSI with fingers directly.**

CAUTION : FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE **F1, 2.5A, 125V FUSE.**

RISK OF FIRE-REPLACE FUSE AS MARKED.

FUSE CAUTION

These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire harzard, replace with the same type fuse. For fuse rating, refer to the marking adjacent to the symbol.

Ce symbole indique que le fusible utilise est à rapide. Pour une protection permanente, n' utiliser que des fusibles de même type. Ce dernier est indiqué là qù le présent symbole est apposé.

17.1. (A) CD Servo Circuit

17.2. (B) Tuner/Main Circuit

17.3. (B) Main Circuit

17.4. (C) Panel Circuit & (D) Tact Switch Circuit

17.5. (E) Transformer Circuit, (F) CD Detect Circuit, (G) Spindle Position Circuit & (H) CD Loading Circuit

17.6. (I) Power Circuit

17.7. (J) Deck Circuit & (K) Deck Mechanism Circuit

18. Printed Circuit Board

Note: Circuit board diagrams may be modified at any time with the development of new technology.

18.1. (A) CD Servo P.C.B. (Side A & B)

18.2. (B) Main/ Tuner P.C.B.

18.3. (C) Panel P.C.B.

18.4. (D) Tact P.C.B.

18.5. (E) Transformer P.C.B.

18.6. (F) CD Detect P.C.B., (G) Spindle Position P.C.B., (H) CD Loading P.C.B. & (L) Tuner Pack P.C.B.

18.7. (I) Power P.C.B.

18.8. (J) Deck P.C.B. & (K) Deck Mechanism P.C.B.

19. Wiring Connection Diagram

20. Illustration of IC's, Transistors and Diodes

21. Terminal Function of IC's

21.1. IC701 (AN22004A-NF) Servo Amplifier

Pin No.	Mark	I/O	Function
1	LPD	I	APC Amp input
2	LD	I	APC Amp output
3	VCC	I	Power supply
4	EQSW	I	Focus signal input terminal 1
5	RFOUT	I	RF summing output
6	RFIN	I	AGC input
7	CAGC	O	AGC Control
8	ARF	O	AGC output
9	CEA	I	Detector's input
10	3TOUT	I	3 T output
11	DCDET	I	Capacitor for HPF amp connection
12	OFTCONT	O	Capacitor 4 OFTR connection
13	BDO	I	BDO output ("H": Drop_out)
14	OFTR	O	OFTR output
15	/RFDET	O	NRFDET output ("L" : detection)
16	LDON	O	Power-down input
17	GND	-	GND
18	EQ8ST	O	OFTR/BDO
19	VREF	-	VREF
20	TEN	I	TE Amp input
21	TEOUT	I	TE Amp output
22	FEN	I	FE Amp input
23	FEOUT	O	FE Amp output
24	GCTL	O	GCTL
25	FBAL	I/O	Focus Balance Control

Pin No.	Mark	I/O	Function
26	TBAL	O	Tracking balance Control
27	E	I	Tracking balance control
28	F	I	Focus balance control
29	D	I	
30	B	I	
31	C	I	
32	A	I	

21.2. IC702 (MN6627934CH) Servo Processor/ Digital Signal Processor/ Digital Filter/ D/A Converter

Pin No.	Mark	I/O	Function
1	DRVDD	-	Power supply for DRAM interface (Pin 2 to 19 and 80)
2	D0	I/O	DRAM data I/O signal 0
3	D1	I/O	DRAM data I/O signal 1
4	NEW	O	DRAM write enable signal
5	NRAS	I/O	DRAM RAS control signal
6	D2	I/O	DRAM data I/O signal 2
7	D3	I/O	DRAM data I/O signal 3
8	NCAS0	O	DRAM CAS control signal 0
9	A10	O	DRAM CAS control signal 10
10	A8	O	DRAM address signal 8
11	A7	O	DRAM address signal 7
12	A6	O	DRAM address signal 6
13	A5	O	DRAM address signal 5
14	A4	O	DRAM address signal 4
15	A9	O	DRAM address signal 9

Pin No.	Mark	I/O	Function
16	A0	O	DRAM address signal 0
17	A1	O	DRAM address signal 1
18	A2	O	DRAM address signal 2
19	A3	O	DRAM address signal 3
20	DVSS2	-	Ground for digital circuits
21	DVDD2	-	Power supply for digital cirfcuits
22	SPOUT	O	Spindle motor drive signal output (absolute value output)
23	TRVP	O	Traverse drive output (positive polarity output)
24	TRVM	O	Traverse drive output (negative porarity output)
25	TRP	O	Tracking drive output (positive polarity output)
26	TRM	O	Tracking drive output (negative polarity output)
27	FOP	O	Focus drive output (positive polarity output)
28	FOM	O	Focus drive output (negative polarity output)
29	IOVDD1	-	Power supply for I/O
30	TBAL	O	Tracking balance adjustment output
31	FBAL	O	Focus balance adjustment output
32	FE	I	Focus error signal input (analog input)
33	TE	I	Tracking error signal input (analog input)
34	RFENV	I	RF envelope signal input (analog input)

Pin No.	Mark	I/O	Function
35	OFT	I	Off-track signaL input High: Off-track)
36	NRFDET	I	RF detection signal input Low: detection
37	BDO	I	Dropout signal input High: Dropout
38	LDON	O	Laser ON signal output High: ON
39	ARF	I	RF signal input
40	IREF	I	Reference current input
41	ADPVCC	I	Voltage input for supply voltage monitor (analog input)
42	DSLF	O	DSL loop filter
43	RFSW	I	DSL loop filter
44	PLLF	O	PLL loop filter
45	PLLFO	O	PLL loop filter
46	AVDD2	-	Power supply for analog circuits (for DSL, PLL and A/D)
47	AVSS2	-	Ground for analog circuits (for DSL, PLL and A/D)
48	OUTL	O	L-ch audio output
49	AVSS1	-	Ground for analog circuits (for audio output stage)
50	OUTR	O	R-ch audio output
51	AVDD1	-	Power supply for analog circuits (for audio output stage)
52	DVSS3	-	Ground for digital circuits
53	DVDD3	-	Power supply for digital circuit
54	TMOD2	I	Test input pin Low: Normal
55	FLAG	O	Flag signal output
56	EXT2	I/O	Expansion I/O port 2
57	EXT0	I/O	Expansion I/O port 0
58	EXT1	I/O	Expansion I/O port 1

Pin No.	Mark	I/O	Function
59	IOVDD2	I	Power supply for I/O
60	TX	O	Digital audio interface output signal
61	MCLK	I	Micro controller command clock signal input (Latches data at the rising adge)
62	MDATA	I	Micro controller command data signal input
63	MLD	I	Micro controller command load signal input Low: Load
64	BLKCK	O	Subcode block clock signal (f=75 Hz in normal-speed playback mode)
65	PWMSEL	I	PWM output mode selection input Low: Direct High: 3- state
66	SMCK	O	4.2336 MHz/ 8.4672 MHz clock signal output
67	SBCK	I	Clock input for subcode serial output
68	STAT	O	Status signal output
69	NRST	I	Reset input Low: Reset
70	SPPOL	O	Spindle motor drive signal output (polarity output)
71	PMCK	O	88.2-kHz clock signal output
72	DQSY	O	Pack signal output for CD-TEXT data
73	TXTD	O	CD-TEXT data signal output
74	TXTCK	O	External clock signal input for CD-TEXT register
75	NTEST	I	Test input pin High: Normal

Pin No.	Mark	I/O	Function
76	OUT X2	O	Crystal oscillator circuit output pin (f= 16.9355 MHz, 33.8688 MHZ)
77	IN X1	I	Crystal oscillator circuit output pin (f= 16.9355 MHz, 33.8688 MHZ)
78	DVSS1	I	Ground for digital circuits
79	DVDD1	I	Power supply for digital circuits
80	MON	O	Monitor for evaluation

21.3. IC703 (AN8739SBTE2) Focus Coil/ Tracking Coil/ Traverse Motor/ Spindle Motor Driver

Pin No.	Mark	I/O	Function
1	/RST	O	RESET output terminal
2	NC	-	N.C.
3	IN2	I	Motor drive (2) input
4	PC2	I	Turntable motor drive signal (“L” :ON)
5	NC	-	N.C.
6	IN1	I	Motor driver (1) input
7	PVCC1	I	Power supoply (1) for driver
8	PGND1	-	Ground connection (1) for driver
9	NC	-	N.C.
10	D1-	O	Motor driver (1) reverse-action output
11	D1+	O	Motor driver (1) forward-action output
12	D2-	O	Motor driver (2) reserse-action output
13	D2+	O	Motor driver (2) forward-action output
14	D3-	O	Motor driver (3) reverse-action output
15	D3+	O	Crystal oscillating circuit input (f = 16.9344MHz)
16	D4-	O	Motor driver (4) reverse-action output

Pin No.	Mark	I/O	Function
17	D4+	O	Motor driver (4) forward-action output
18	NC	-	N.C.
19	PGND2	-	Ground connection (2) for driver
20	PVCC2	-	Power supply (2) for driver
21	VCC	-	Power supply terminal
22	VREF	-	Reference voltage input
23	IN4	I	Motor driver (4) input
24	IN3	I	Motor driver (3) input
25	RSTIN	I	Reset terminal
26	NC	-	N.C.

21.4. IC305 (C2CBJF000003) System Microprocessor

Pin No.	Mark	I/O	Function
1	LM_1	O	Level meter left (for AK320) /SPEANA Input (for AK520) NC (for AK220)
2	LM_2	O	Level meter right (for AK320)/ NC (for AK520/220)
3	NC	-	No connection
4	RDS_DAT	I	RDS data input (for AK320)/ NC for AK520/220)
5	RDS_CLK	I	RDS clock input (for AK320) NC (for AK520/220)
6	MBP1	O	Microcomputer beat proof output 1 (CONTROL)
7	MBP2	O	Micro computer beat proof output 2 (CONTROL)
8	BYTE	-	External data bus width select input (Connect to ground)
9	CNVSS/ EFP_CNVSS	-	Flash mode terminal (Connect to ground)

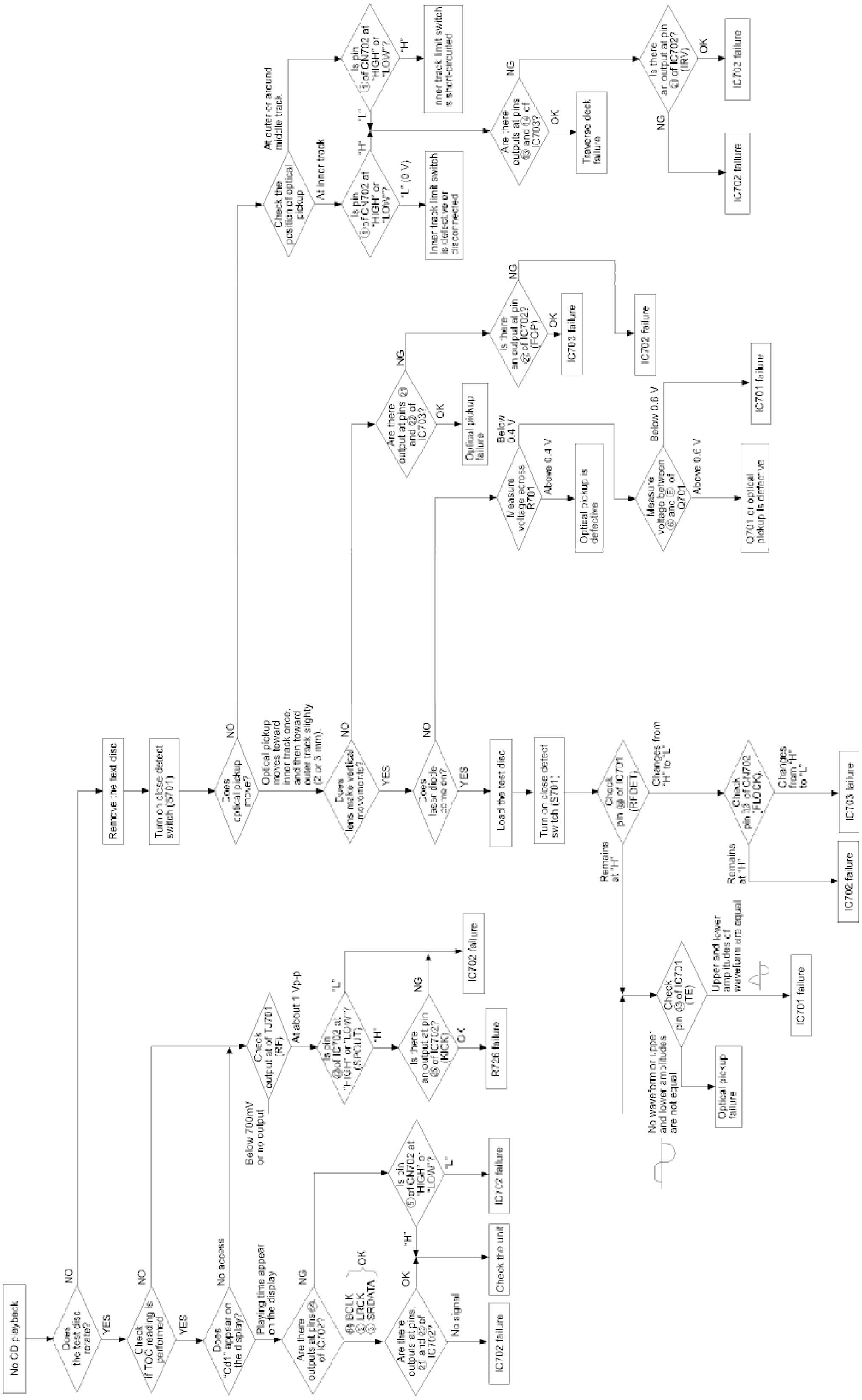
Pin No.	Mark	I/O	Function
10	XC_IN	-	32.768 kHz sub clock
11	XC_OUT	-	32.768 kHz sub clock
12	/RESET/ EFP_RESET	I	Reset input (ACTIVE L)
13	X_OUT	O	10 MHz main clock
14	Vss	-	Ground (0V)
15	XIN	-	10 MHz main clock
16	Vcc	-	Power supply (+5V)
17	/NMI	-	Connect to Vcc (+5V)
18	RMT	I	Remote control input
19	BLKCK	I	CD block clock input (Inverted)
20	SYNC	I	AC failure detect input
21	ST/DO	I	Tuner IF data/ stereo input
22	SD	I	Tuner signal detect input
23	PLLCK	O	Tuner PLL clock output
24	PLLDA	O	Tuner PLL data output
25	PLLCE	O	Tuner PLL Chip Enable
26	ASP_DAT	O	ASP data
27	ASP_CLK	O	ASP clock
28	NC	-	No connection
29	SW_LVL1	-	Sub Woofer Level 1 (AK520 only)/ No connection (AK320/ 220)
30	SW_LVL2	-	Sub Woofer Level 2 (AK520 only)/ No connection (AK320/ 220)
31	NC	-	No connection
32	NC	-	No connection
33	NC	-	No connection
34	NC	-	No connection
35	NC	-	No connection
36	NC	-	No connection
37	NC	-	No connection
38	NC	-	No connection
39	MUTE_H	O	HIC mute
40	MUTE_A	O	Audio mute
41	EE_CS/EFP_ /EPM	O	EEPROM chip select

Pin No.	Mark	I/O	Function
42	EE_CLK	O	EEPROM clock
43	EE_DAT	I/O	EEPROM data
44	NC	-	No connection
45	NC	-	No connection
46	PCONT/ EFP_/CE	O	Main transformer control output
47	DCDET	I	DC detect input
48	SP_A	O	Speana control output A
49	SP_B	O	Speana control output B
50	SP_C	O	Speana control output C
51	NC	-	No connection
52	HALF_1	I	Deck 1 half playback input
53	MODE_1	I	Deck 1 mode playback input
54	PHOTO_2	I	Rotation detection signal (Deck 2)
55	PHOTO_1	I	Rotation detection signal (Deck 1)
56	PLG1	O	Deck 1 plunger control
57	PLG2	O	Deck 2 plunger control
58	MTR	O	Deck motor control (“H” for motor ON)
59	REC	O	H when record circuit is operating
60	DECK1_H	O	H when DECK 1 P/B head is selected
61	NC	-	No connection
62	Vcc	-	Power supply (+5V)
63	NC	-	No connection
64	Vss	-	Ground (0V)
65	DMT	O	Deck mute at mecha transition (“L” for MUTE ON)
66	BP1	O	AM beatproof 1 output (“H” for BP1 ON)
67	V_JOG_A	I	Volume Jog A
68	V_JOG_B	I	Volume Jog B
69	EX1_CLK	O	I/O expander clock output (for AK620) (Subwoofer and Jog LED control)

Pin No.	Mark	I/O	Function
70	**EX1_DAT**	**O**	**I/O expander data output (for AK520) (Subwoofer and jog LED control)**
71	**FL_RESET**	**I**	**Reset input (ACTIVE L)**
72	**FL_CS**	**I/O**	**FL driver chip select**
73	**FL_DOUT**	**O**	**Serial data to FL driver (Output)**
74	**FL_CLK**	**I/O**	**Serial clock to FL driver**
75	**/CD**	**O**	**CD power control (Active low)**
76	**SSEQ_LED**	**O**	**Super Sound EQ LED**
77	**CD_RST**	**O**	**CD reset output**
78	**STATUS**	**I**	**CD Servo LSI status input**
79	**MLD**	**O**	**CD command load output**
80	**MDATA**	**O**	**CD command data output**
81	**MCLK**	**O**	**CD command clock output**
82	**/RESTSW**	**I**	**CD limit switch input for the most inner point (Active Low)**
83	**CHG_HLF**	**O**	**Changer half drive output**
84	**CHG_CW**	**O**	**Changer motor clockwise output**
85	**CHG_CCW**	**O**	**Changer motor counterclockwise output**
86	**CHG_SW1**	**I**	**CD changer switch 1 input**
87	**CHG_SW2**	**I**	**CD changer switch 2 input**
88	**CHG_PLR**	**O**	**Changer plunger output**
89	**CHG_AD2**	**I**	**Changer AD detecton input (Position/Bottom)**
90	**CHG_AD1**	**I**	**Changer AD detecton input (Open/Clamp)**
91	**DECK2**	**I**	**DECK CONDITION INPUT 2 (R_INHF/MODE2/R_INHR/HALF2)**
92	**KEY3**	**I**	**KEY3 INPUT**
93	**KEY2**	**I**	**KEY2 INPUT**

Pin No.	Mark	I/O	Function
94	KEY1	I	KEY1 INPUT
95	REG_2	I	Region setting 2
96	AVss	-	Analog power supply input (Connect to GND)
97	REG_1	I	Region setting 1
98	VREF	-	Reference for A-D (5V)
99	AVcc	-	Analog power supply input
100	DEMO SELECTOR	I	(H= default demo on, L= default demo off.)

22. Troubleshooting Guide


No CD playback
Does the test disc rotate?
NO
YES
Check if TOC reading is performed
NO
YES
Does "Cd1" appear on the display?
No access
Playing time appear on the display
Are there outputs at pins of IC702?
NG
BCLK
LRCK
SRDATA
OK
Are there outputs at pins 21 and 23 of IC702?
No signal
IC702 failure
OK
Check the unit
"H"
Is pin ⑤ of CN702 at "HIGH" or "LOW"?
"L"
IC702 failure
Below 700mV or no output
Check output at of TJ701 (RF)
At about 1 Vp-p
Is pin of IC702 at "HIGH" or "LOW"? (SPOUT)
"L"
IC702 failure
"H"
Is there an output at pin of IC702? (KICK)
NG
OK
R726 failure
Remove the test disc
Turn on close detect switch (S701)
Does optical pickup move?
NO
Optical pickup moves toward inner track once, and then toward outer track slightly (2 or 3 mm).
Does lens make vertical movements?
NO
YES
Does laser diode come on?
NO
YES
Load the test disc
Turn on close detect switch (S701)
Check pin of IC701 (RFDET)
Remains at "H"
Changes from "H" to "L"
Check pin of CN702 (FLOCK)
Remains at "H"
IC702 failure
Changes from "H" to "L"
IC703 failure
Check pin of IC701 (TE)
No waveform or upper and lower amplitudes are not equal
Optical pickup failure
Upper and lower amplitudes of waveform are equal
IC701 failure
Are there output at pins and of IC703?
NG
OK
Optical pickup failure
Is there an output at pin of IC702? (FCP)
NG
OK
IC703 failure
IC702 failure
Measure voltage across R701
Below 0.4 V
Above 0.4 V
Optical pickup is defective
Measure voltage between ⑥ and ⑤ of Q701
Below 0.6 V
IC701 failure
Above 0.6 V
Q701 or optical pickup is defective
Check the position of optical pickup
At outer or around middle track
At inner track
Is pin ① of CN702 at "HIGH" or "LOW"?
"H"
"L" (0 V)
Inner track limit switch is defective or disconnected
Is pin ① of CN702 at "HIGH" or "LOW"?
"L"
"H"
Inner track limit switch is short-circuited
Are there outputs at pins and of IC703?
NG
OK
Traverse deck failure
Is there an output at pin of IC702? (IRV)
NG
OK
IC702 failure
IC703 failure

23. Parts Location and Replacement Parts List

Notes:

- Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardent (resistors), high-quality sound (capacitors), low noise (resistors), etc are used.
When replacing any of these components, be sure to use only manufacturer's specified parts shown in the parts list.

- The parenthesized indications in the Remarks columns specify the areas or colour. (Refer to the cover page for area or colour)
Parts without these indications can be used for all areas.

- Warning: This product uses a laser diode. Refer to caution statements on "Precaution of Laser Diode".

- Capacitor values are in microfarads (μ F) unless specified otherwise, P= Pico-farads (pF), F= Farads.

- Resistance values are in ohms, unless specified otherwise, 1K= 1,000 (OHM).

- The marking (RTL) indicates that the Retention Time is limited for this items. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of a availabilityis dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

- [M] Indicates in the Remarks columns indicates parts supplied by PAVCSG.

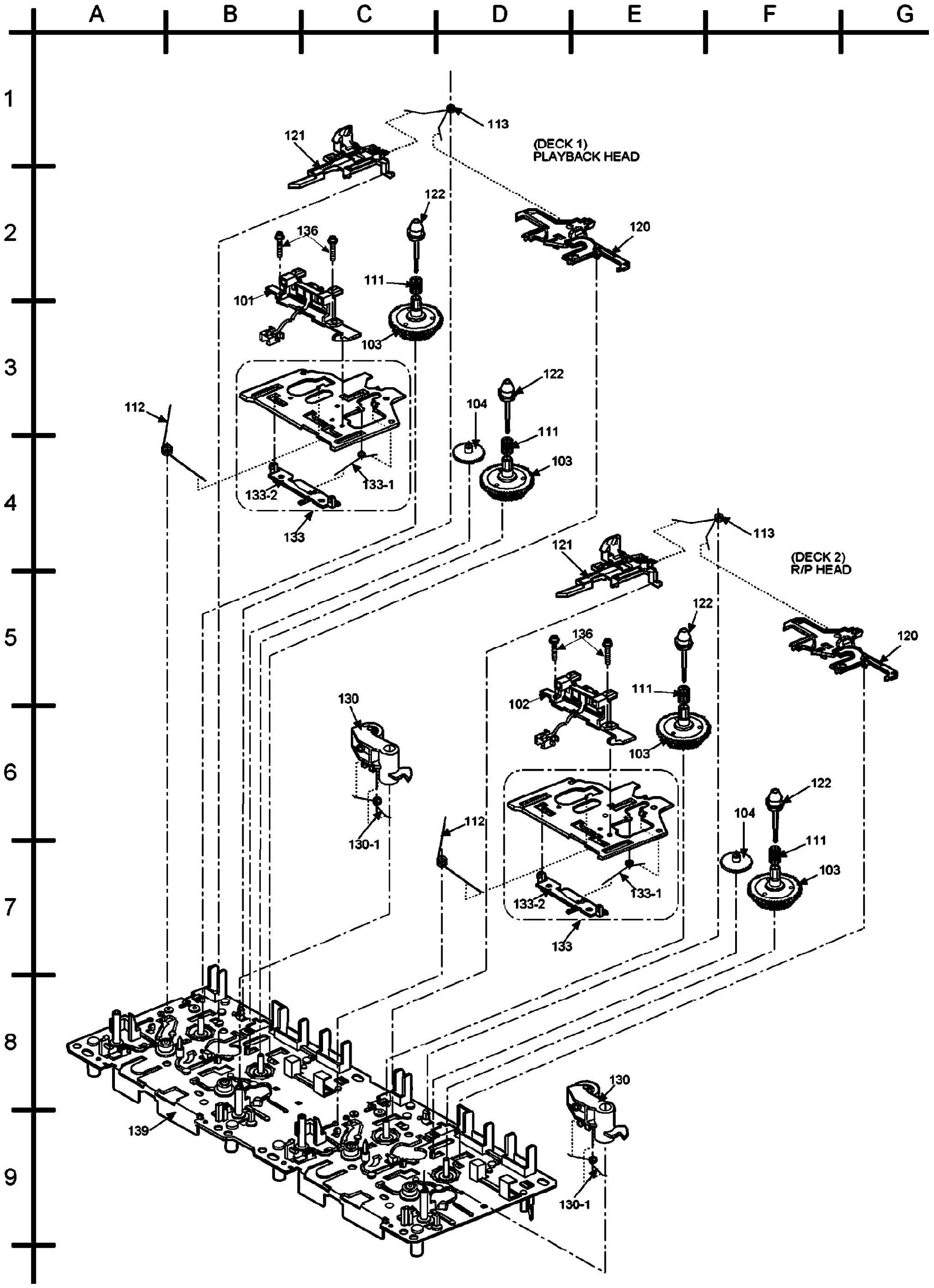
- The "(SF)" mark denotes the standard part.

- Reference for O/I book languages are as follows:

Ar:	Arabic	Du:	Dutch	It:	Italian	Sp	Spanish
Cf:	Canadian French	En:	English	Ko:	Korean	Sw:	Swedis
Cz:	Czech	Fr:	French	Po:	Polish	Co:	Traditio Chinese
Da:	Danish	Ge:	German	Ru:	Russian	Cn:	Simplifi Chinese
Pe:	Persian						

23.1. Deck Mechanism (RAA4502-S)

23.1.1. Deck Mechanism Parts Location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113
121
(DECK 1)
PLAYBACK HEAD
122
120
136
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103
112
122
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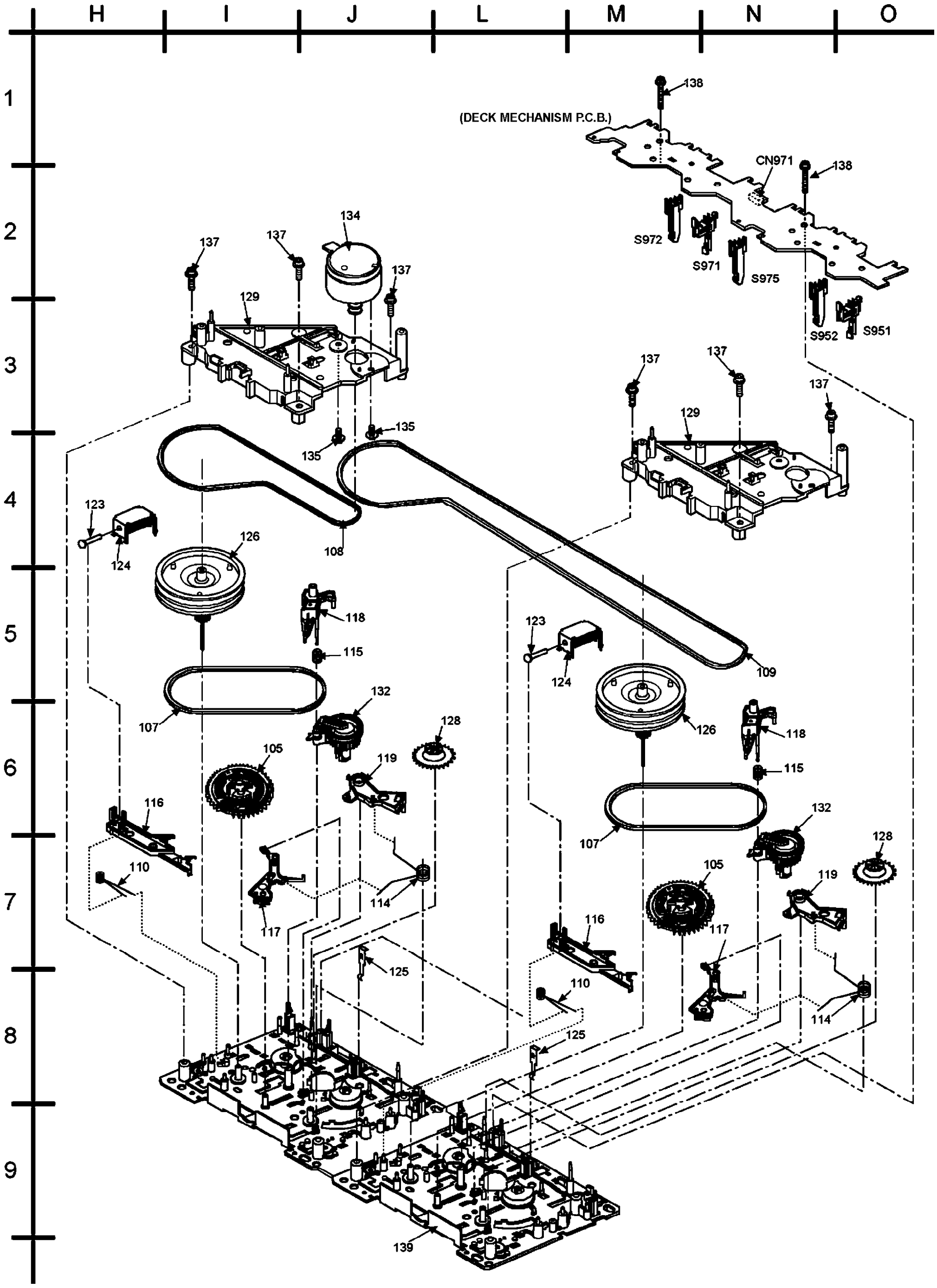
103
133-2
133-1
133
113
(DECK 2)
R/P HEAD
121
122
136
120
130
111
102
103
130-1
112
122
104
111
103
133-2
133-1
133
130
139
130-1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138
(DECK MECHANISM P.C.B.)
CN971
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S972
S971
S975
S952
S951
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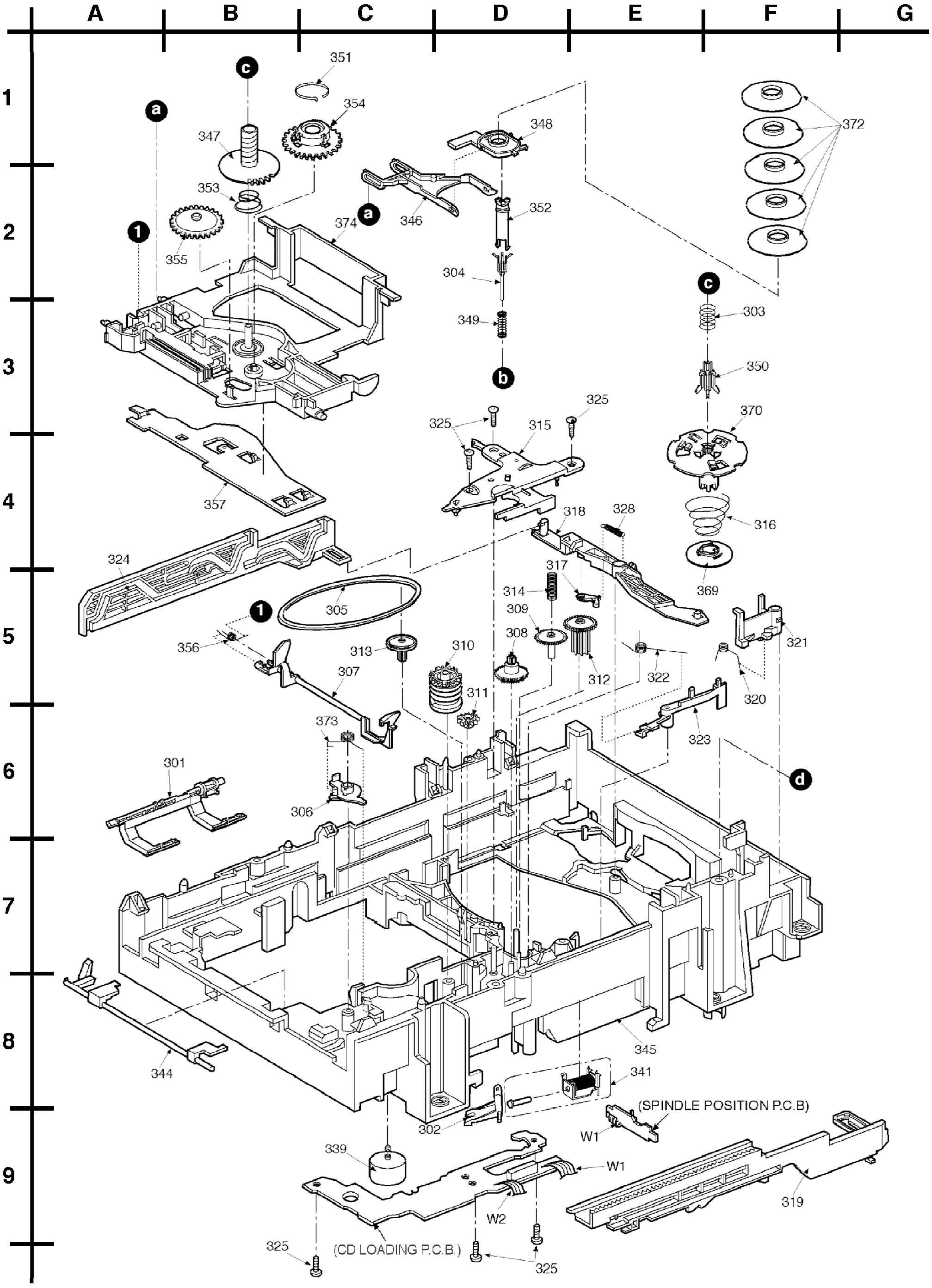
139

23.1.2. Deck Mechanism Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CASSETTE DECK	
101	RED0069	R/P HEAD BLOCK UNIT	[M]
102	RED0070	P/B HEAD BLOCK UNIT	[M]
103	RDG0300	REEL BASE GEAR	[M]
104	RDG0301	WINDING RELAY GEAR	[M]
105	RDK0026	MAIN GEAR	[M]
107	RDV0033-4	WINDING BELT	[M]
108	RDV0064	CAPSTAN BELT	[M]
109	RDV0071	CAPSTAN BELT B	[M]
110	RMB0312	TRIGGER LEVER SPRING	[M]
111	RMB0400	REEL SPRING	[M]
112	RMB0403	HEAB PANEL SPRING	[M]
113	RMB0404	BRAKE ROD SPRING	[M]
114	RMB0406	FR LEVER SPRING	[M]
115	RMB0408	THRUST SPRING	[M]
116	RML0370	TRIGGER LEVER	[M]
117	RML0371	FR LEVER	[M]
118	RML0372	WINDING LEVER	[M]
119	RML0374	EJECT LEVER	[M]
120	RMM0131	BRAKE ROD	[M]
121	RMM0133	EJECT ROD	[M]
122	RMQ0519	REEL HUB	[M]
123	RMS0398-1	MOVING CORE	[M]
124	RSJ0003	PLUNGER ASS’Y	[M]
125	RMC0061	PACK SPRING	[M]
126	RXF0061	FLYWHEEL F ASS’Y	[M]
128	RXG0040	FF RELAY GEAR ASS’Y	[M]
129	RMK0283A-J	SUB-CHASSIS	[M]
130	RXL0124	PINCH ROLLER F ASS’Y	[M]
130-1	RMB0401	PINCH ARM SPRING F	[M]
132	RXL0126	WINDING ARM ASS’Y	[M]
133	RXQ0412	HEAD PANEL ASS’Y	[M]
133-1	RMB0405	FR ROD SPRING	[M]
133-2	RMM0132	FR ROD	[M]
134	REM0121	CAP MOTOR ASS’Y	[M]
135	RHD26022	MOTOR SCREW	[M]
136	XTW2+5L	HEAD BLOCK UNIT SCREW	[M]
137	XTW26+10S	SUB-CHASSIS SCREW	[M]
138	XYC2+JF17	PCB EARTH SCREW	[M]
139	RFKJAA4501-S	CHASSIS ASS’Y	[M]

23.2. CD Loading Mechanism (RD-DAC026-S)

23.2.1. CD Loading Mechanism Parts Location


A
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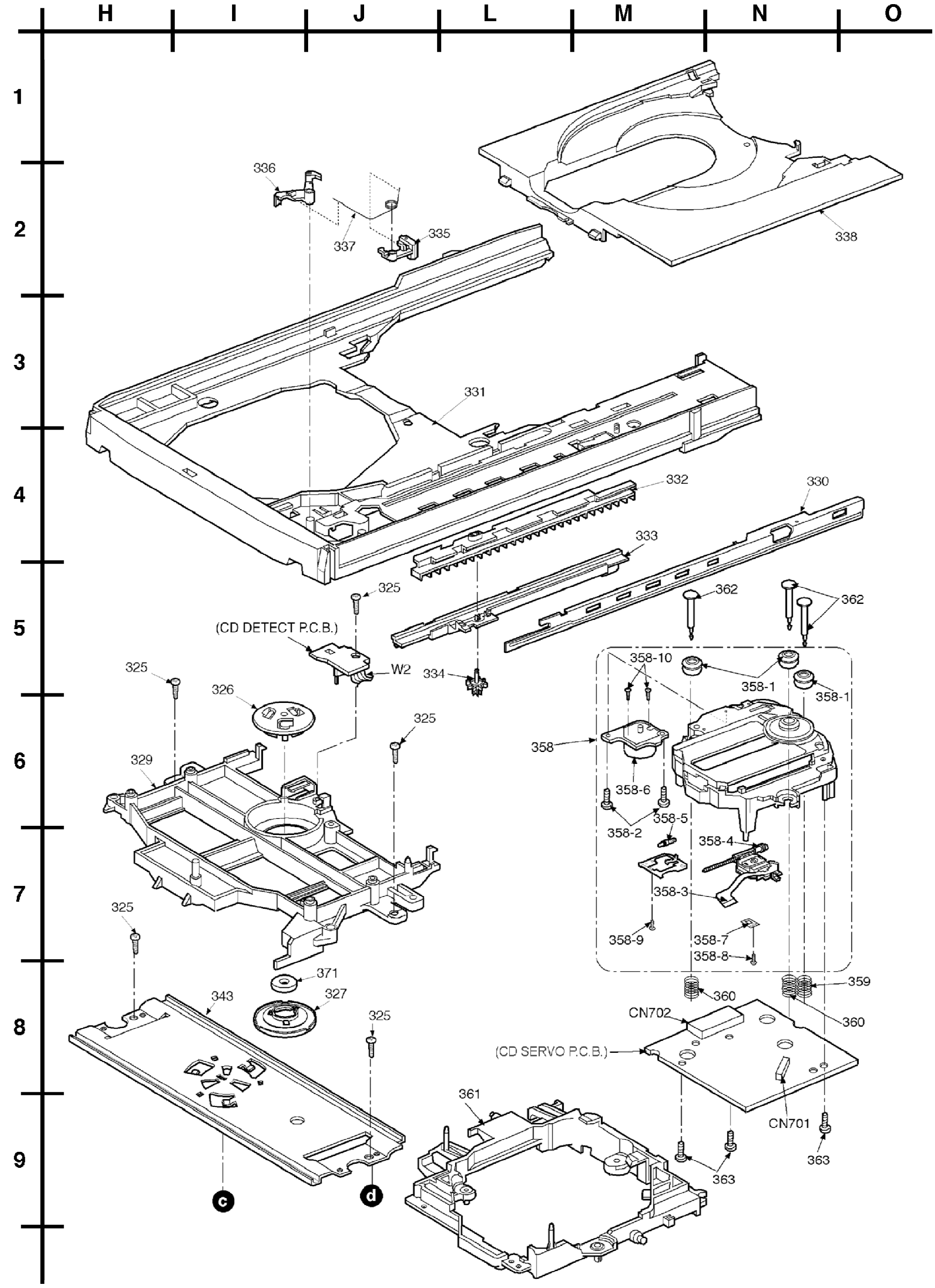
a
a
c
b
d
(SPINDLE POSITION P.C.B)
W1
W1
W2
(CD LOADING P.C.B.)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338
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332
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333
325
(CD DETECT P.C.B.)
W2
334
362
362
358-10
358-1
358-1
325
326
325
358
329
358-6
358-2
358-5
358-4
358-3
325
358-9
358-7
358-8
371
359
343
327
360
CN702
360
325
(CD SERVO P.C.B.)
361
CN701
363
363
c
d

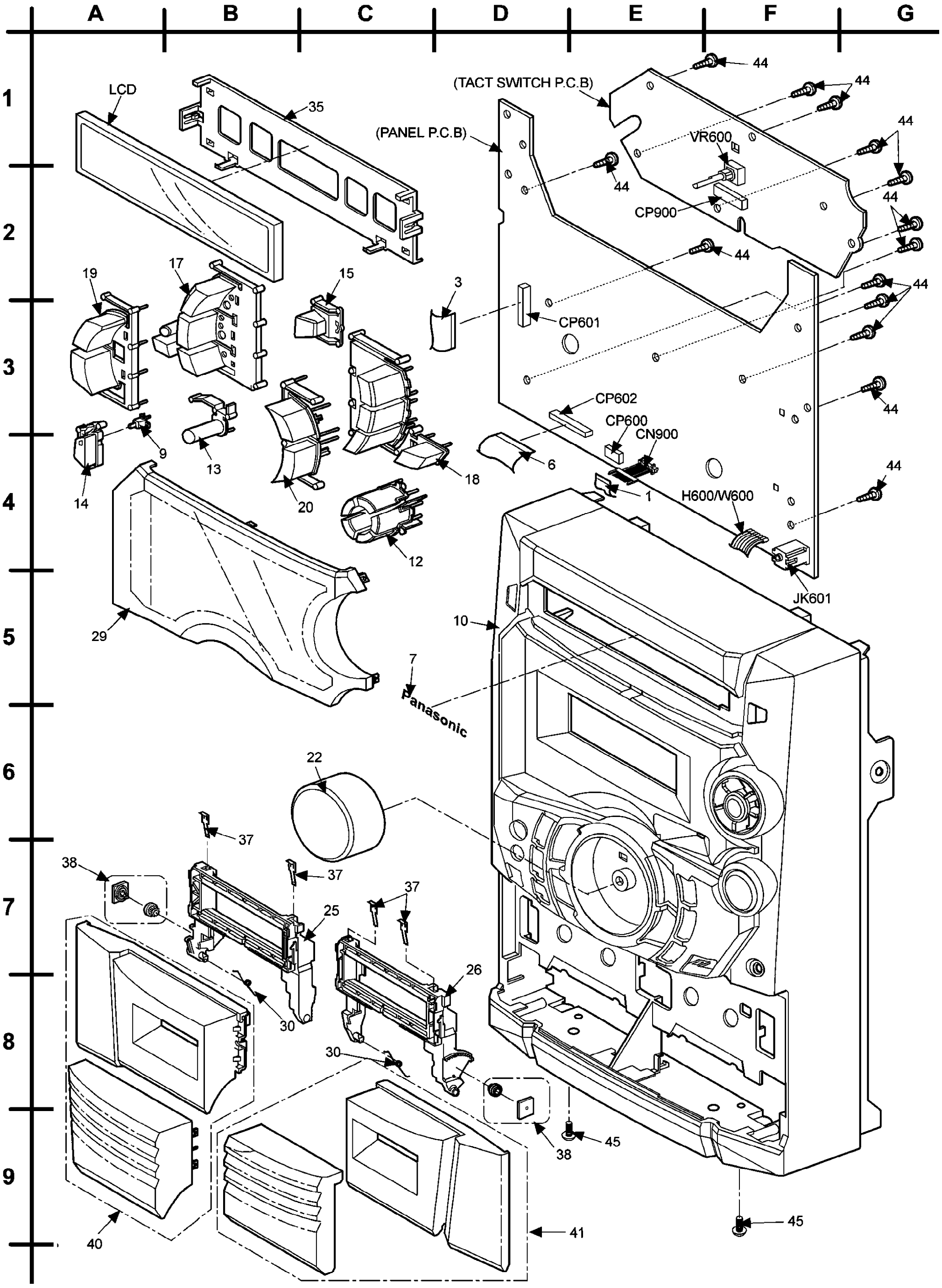
23.2.2. CD Loading Mechanism Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		TRAVERSE DECK	
301	RML0517	TIMING LEVER	[M]
302	RML0516	PLUNGER LEVER	[M]
303	RMB0551	UPPER SPINDLE SPRING	[M]
304	RMQ0744	LOWER HOOK	[M]
305	RDV0056	BELT	[M]
306	RML0525	FRONT LOCK LEVER	[M]
307	RML0526	DISC LEVER	[M]
308	RDG0424	DRIVE GEAR	[M]
309	RDG0425	CHANGE GEAR	[M]
310	RDG0427	TRAVERSE CAM GEAR	[M]
311	RDG0428	TRAVERSE RELAY GEAR	[M]
312	RDG0426	UP/DOWN GEAR	[M]
313	RDG0429	PULLEY GEAR	[M]
314	RMB0549-1	CHANGE GEAR SPRING	[M]
315	RMQ0748	PITCH PLATE	[M]
316	RMB0553	PUSH SPRING	[M]
317	RML0530	ASSIST LEVER	[M]
318	RML0518	CONNECTION LEVER	[M]
319	RMM0201	SLIDE PLATE 1	[M]
320	RME0258	REAR LOCK SPRING	[M]
321	RML0521	REAR LOCK	[M]
322	RME0257	TRAY LOCK LEVER SPRING	[M]
323	RML0520	TRAY LOCK	[M]
324	RMM0202	SLIDE PLATE 2	[M]
325	XTB3+10J	SCREW	[M]
326	RMR0334	FIXED PLATE	[M]
327	RMR0624-W2	CLAMPER	[M]
328	RMB0561	ASSIST LEVER SPRING	[M]
329	RMR1121-K	MECHA COVER	[M]
330	RMA1110-2	TRAY ANGLE	[M]
331	RMR1122-H1	TRAY BASE	[M]
332	RMM0204	CARRIER	[M]
333	RMM0203	DRIVE RACK	[M]
334	RDG0432	SPEED UP GEAR	[M]
335	RML0524	SLIDE LOCK	[M]
336	RML0523	CARRIER LOCK	[M]
337	RME0260-1	SLIDE LOCK SPRING	[M]
338	RMR1123-H	TRAY	[M]
339	RXQ0595	MOTOR SUB ASS’Y	[M]
341	RSJ0003	SOLENOLD ASS’Y	[M]
343	RMA1106	UPPER PLATE	[M]
344	RML0519	CD LEVER	[M]
345	RFKNAAK27GCS	MECHA BASE ASS’Y	[M]
346	RML0522	TURNING STOPPER	[M]
347	RMQ0745	LOWER SPINDLE	[M]
348	RMQ0746	UP/DOWN BASE	[M]
349	RMB0550	LOWER SPINDLE SPRING	[M]
350	RMQ0747	UPPER HOOK	[M]
351	RME0263	CLICK SPRING	[M]
352	RMQ0743	SPINDLE SHAFT	[M]
353	RMB0552	CUSHION SPRING	[M]
354	RDG0430	RELAY GEAR ‘A’	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
355	RDG0431	RELAY GEAR ‘B’	[M]
356	RME0262	DISK LEVER SP.	[M]
357	RMA1105	SUPPORT PLATE	[M]
358	RAE0153Z-S	TRAVERSE	[M]
358-1	SHGD113-1	FLOATING CUSHION	[M]
358-2	SNSD38	TRV MOTOR ASSY SCREW	[M]
358-3	RAF0152A-S	OPU ASS’Y	[M]
358-4	RDG0247	DRIVE GEAR	[M]
358-5	RDG0248	RELAY GEAR	[M]
358-6	RXQ0339	TRAVERSE MOTOR ASS’Y	[M]
358-7	RXQ0304-1	NUT PLATE ASS’Y	[M]
358-8	XQN17+CG5	NUT PLATE ASSY SCREW	[M]
358-9	XQS2+A3FZ	SPINDLE MOTOR SCREW	[M]
358-10	XQS17+A35FZ	TRAVERSE MOTOR SCREW	[M]
359	RME0142	FLOATING SPRING A	[M]
360	RME0109	FLOATING SPRING B	[M]
361	RMR1124A-K	TRAVERSE CHASSIS	[M]
362	RMS0632	TRAVERSE PIN	[M]
363	XTN2+6G	SCREW	[M]
369	RMX0141	PUSH SPACER	[M]
370	RMQ0749	UPPER SPINDLE	[M]
371	RHM0001	MAGNET	[M]
372	RMX0140	DISC SPACER	[M]
373	RME0261	FRONT LOCK SPRING	[M]
374	RMQ0742	SPINDLE BASE	[M]

23.3. Cabinet

23.3.1. Cabinet Parts Location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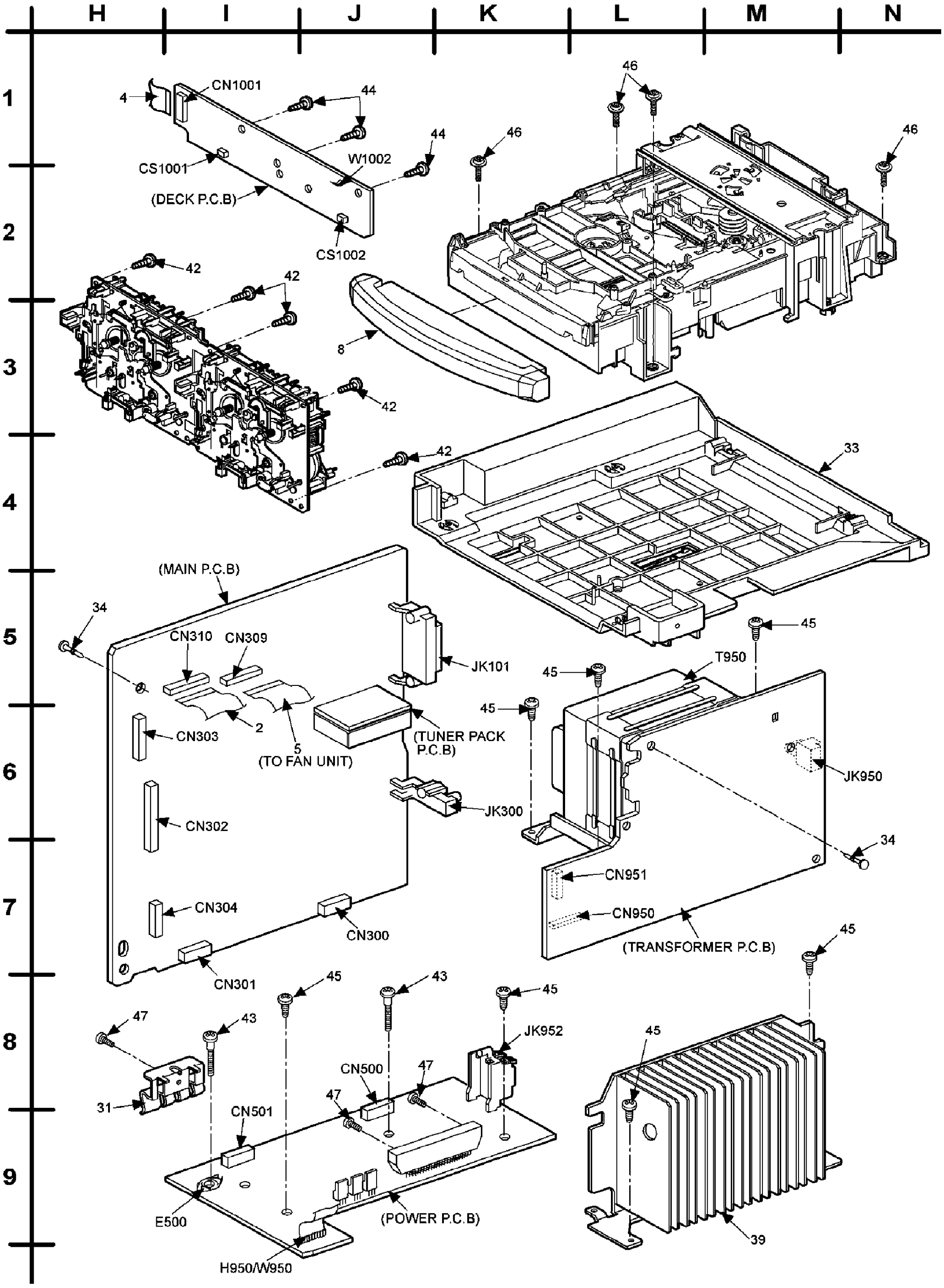
LCD
(TACT SWITCH P.C.B)
(PANEL P.C.B)
VR600
CP900
CP601
CP602
CP600
CN900
H600/W600
JK601
Panasonic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CN1001
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CS1001
W1002
(DECK P.C.B)
CS1002
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42
33
(MAIN P.C.B)
34
CN310
CN309
JK101
T950
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CN303
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(TO FAN UNIT)
(TUNER PACK
P.C.B)
JK950
CN302
JK300
34
CN951
CN304
CN300
CN950
(TRANSFORMER P.C.B)
45
CN301
45
43
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47
43
JK952
CN500
47
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31
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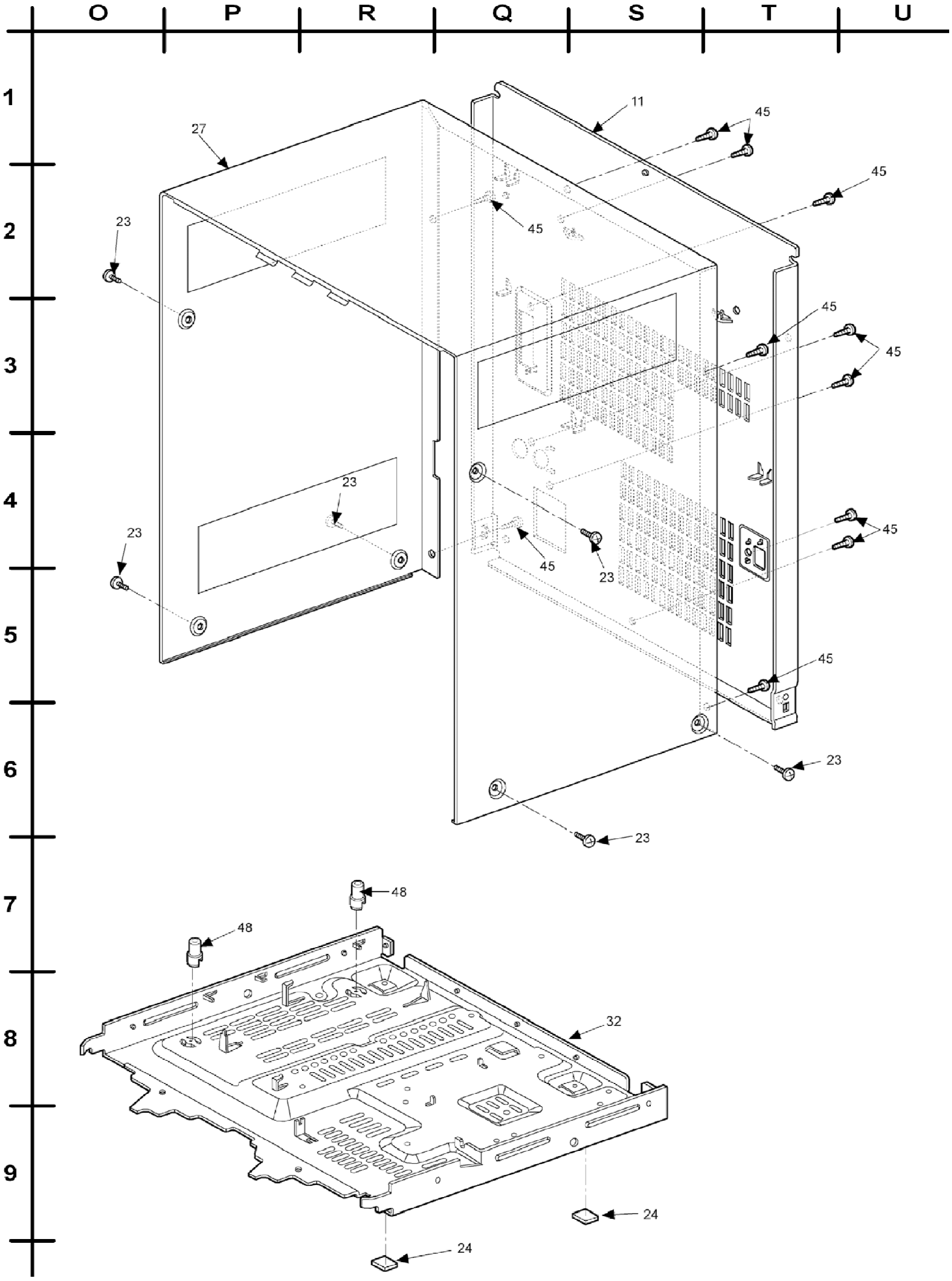
CN501
E500
(POWER P.C.B)
39
H950/W950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23.3.2. Cabinet Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	REEX0202	10P FFC	[M]
2	REEX0204	19P FCC	[M]
3	REEX0210	17P FFC	[M]
4	REEX0211	14P FFC WIRE	[M]
5	REEX0212	14P FFC WIRE	[M]
6	REEX0215	30P FFC	[M]
7	RGBX0011-S	PANA BADGE	[M]
8	RGKX0241A-K	CD LID	[M]PC-K/ P-K
8	RGKX0241A-S	CD LID	[M]P-S
9	RGLX0081-Q	POWER LIGHT CHIP	[M]
10	RGPX0143-K	FRONT PANEL	[M]PC-K/ P-K
10	RGPX0143-S	FRONT PANEL	[M]P-S
11	RGRX0023JF1A	REAR PANEL	[M]P-K/ P-S
11	RGRX0023JG1A	REAR PANEL	[M]PC-K
12	RGUX0486-R	CD CONTROL BUTTON	[M]PC-K/ P-K
12	RGUX0486-S	CD CONTROL BUTTON	[M]P-S
13	RGUX0547-R	SS EQ BUTTON	[M]
14	RGUX0546-KJ	POWER BUTTON	[M]PC-K/ P-K
14	RGUX0546-SJ	POWER BUTTON	[M]P-S
15	RGUX0552-KJ	CD EJECT BUTTON	[M]PC-K/ P-K
15	RGUX0552-SJ	CD EJECT BUTTON	[M]P-S
17	RGUX0550-K2J	DECK CONTROL BTN (L)	[M]PC-K/ P-K
17	RGUX0550-S2J	DECK CONTROL BTN (L)	[M]P-S
18	RGUX0551-K1J	DECK CONTROL BUTTON	[M]PC-K/ P-K
18	RGUX0551-S1J	DECK CONTROL BUTTON	[M]P-S
19	RGUX0548-SJ	FUNCTION BUTTON (L)	[M]
20	RGUX0549-SJ	FUNCTION BUTTON (R)	[M]
22	RGWX0070-S	VOLUME KNOB	[M]
23	RHD30004-2S	SCREW	[M]P-S
23	RHD30004-K	SIDE SCREW	[M]PC-K/ P-K
24	RKA0059-K	LEG RUBBER	[M]
25	RKFX0093-KJ	CASS HOLDER L	[M]
26	RKFX0094-KJ	CASS HOLDER R	[M]
27	RKMX0077A-K	TOP CABINET (BENT)	[M]PC-K/ P-K
27	RKMX0077A-S	TOP CABINET (BENT)	[M]P-S
29	RKWX0225-H	FL WINDOW	[M]
30	RMBX0021	CASS OPEN SPRING	[M]
31	RMCX0021-J	TRANSISTOR CLIP	[M]
32	RMKX0064	BOTTOM CHASSIS	[M]
33	RMKX0088-J	CD CHASSIS	[M]
34	RMNX0019	PCB SPACER	[M]
35	RMNX0119-K	FL HOLDER	[M]
37	RUS757ZAA	CASS HALF SPRING	[M]
38	RXGX0002	DAMPER GEAR	[M]
39	RXXX0038-J	HEAT SINK UNIT	[M]
40	RYFX0130-KJ	CASS LID UNIT (L)	[M]PC-K/ P-K
40	RYFX0130-SJ	CASS LID UNIT (L)	[M]P-S
41	RYFX0131-KJ	CASS LID UNIT (R)	[M]PC-K/ P-K
41	RYFX0131-SJ	CASS LID UNIT (R)	[M]P-S
42	XTB3+10JFZ	SCREW	[M]
43	XTB3+20J	SCREW	[M]
44	XTBS26+10J	SCREW	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
45	XTBS3+8JFZ1	SCREW	[M]
46	XTW3+12T	SCREW	[M]
47	XTW3+15T	SCREW	[M]
48	SHE187-5J	PCB SUPPORT	[M]

23.4. Electrical Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		PRINTED CIRCUIT BOARD	
	REPX0405A	CD SERVO P.C.B. (SIDE A/B)	[M](RTL)
	REPX0422B	MAIN/ TUNER P.C.B.	[M](RTL)
	REPX0426A	PANEL P.C.B.	[M](RTL)
	REPX0426A	TACT P.C.B.	[M](RTL)
	REPX0324K	TRANSFORMER P.C.B.	[M](RTL)
	REP2578A-N	CD DETECT P.C.B.	[M](RTL)
	REP2578A-N	SPINDLE POSITION P.C.B.	[M](RTL)
	REP2578A-N	CD LOADING P.C.B.	[M](RTL)
	REPX0328K	POWER P.C.B.	[M](RTL)
	REPX0331A	DECK P.C.B.	[M](RTL)
	REPX0321A	DECK MECHANISM P.C.B.	[M](RTL)
	REP1999B	TUNER PACK P.C.B.	[M](RTL)
		INTEGRATED CIRCUITS	
IC1	C0GAM0000005	IC DRIVE	[M]
IC101	LA1833NMNTLM	IC IF & MPX	[M]
IC102	LC72131MDTRM	IC PLL	[M]
IC300	C1BB00000747	IC ASP	[M]
IC301	C0AABB000117	IC OP-AMP (HP AMP)	[M]
IC305	C2CBJF000017	IC MICRO-P	[M]
IC501	RSN35H2A-P	IC HIC	[M]
IC602	C0HBB0000040	IC FL DRIVER	[M]
IC603	C0JBAE000192	IC XOR GATE	[M]
IC701	AN22004A-NF	IC HEAD AMP	[M]
IC702	MN6627934CH	IC LSI	[M]
IC703	AN8739SBTE2	IC 4CH DRIVER	[M]
IC704	C3ABMB000027	IC 16M DRAM	[M]
IC951	CNB13030R2AU	IC PHOTO INTERUPTOR	[M]
IC971	CNB13030R2AU	IC PHOTO INTERUPTOR	[M]
IC1001	AN7348S-E1	IC TAPE PB	[M]
IC1004	C1AA00000612	IC SW	[M]
		TRANSISTORS	
Q1	2SK544F-AC	TRANSISTOR	[M]
Q1	B1GACFGG0004	TRANSISTOR	[M]
Q2	2SC2786MTA	TRANSISTOR	[M]
Q3	2SC2787FL1TA	TRANSISTOR	[M]
Q4	2SC2787FL1TA	TRANSISTOR	[M]
Q101	2SC2058SPTA	TRANSISTOR	[M]
Q106	B1GCCFJJ0015	TRANSISTOR	[M]
Q201	B1ABCF000131	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q202	**B1ABEB000001**	**TRANSISTOR**	**[M]**
Q203	**B1ABEB000001**	**TRANSISTOR**	**[M]**
Q207	**B1ABEB000001**	**TRANSISTOR**	**[M]**
Q301	**B1GDCFJJ0023**	**TRANSISTOR**	**[M]**
Q302	**B1ABCF000131**	**TRANSISTOR**	**[M]**
Q303	**B1ABCF000131**	**TRANSISTOR**	**[M]**
Q308	**KTA12710YTA**	**TRANSISTOR**	**[M]**
Q309	**KTC3199GRTA**	**TRANSISTOR**	**[M]**
Q310	**B1GCCFGA0005**	**TRANSISTOR**	**[M]**
Q312	**B1GBCFJJ0039**	**TRANSISTOR**	**[M]**
Q313	**B1ABCF000131**	**TRANSISTOR**	**[M]**
Q314	**B1ABCF000131**	**TRANSISTOR**	**[M]**
Q315	**B1GACFLL0007**	**TRANSISTOR**	**[M]**
Q316	**B1ACCF000063**	**TRANSISTOR**	**[M]**
Q317	**B1ACCF000063**	**TRANSISTOR**	**[M]**
Q318	**B1GBCFJJ0039**	**TRANSISTOR**	**[M]**
Q319	**B1GBCFJJ0039**	**TRANSISTOR**	**[M]**
Q320	**B1GBCFJJ0039**	**TRANSISTOR**	**[M]**
Q321	**B1GDCFJJ0023**	**TRANSISTOR**	**[M]**
Q322	**B1GBCFJJ0039**	**TRANSISTOR**	**[M]**
Q323	**B1GBCFJJ0039**	**TRANSISTOR**	**[M]**
Q324	**KTA12710YTA**	**TRANSISTOR**	**[M]**
Q325	**B1GDCFJJ0023**	**TRANSISTOR**	**[M]**
Q326	**KTA12710YTA**	**TRANSISTOR**	**[M]**
Q327	**B1GBCFJJ0039**	**TRANSISTOR**	**[M]**
Q328	**B1GDCFJJ0023**	**TRANSISTOR**	**[M]**
Q401	**B1ABCF000131**	**TRANSISTOR**	**[M]**
Q402	**B1ABEB000001**	**TRANSISTOR**	**[M]**
Q403	**B1ABEB000001**	**TRANSISTOR**	**[M]**
Q407	**B1ABEB000001**	**TRANSISTOR**	**[M]**
Q409	**B1ABCF000131**	**TRANSISTOR**	**[M]**
Q501	**B1BACG000009**	**TRANSISTOR**	**[M]**
Q502	**B1BCCG000021**	**TRANSISTOR**	**[M]**
Q503	**B1BACG000009**	**TRANSISTOR**	**[M]**
Q504	**B1BCCG000021**	**TRANSISTOR**	**[M]**
Q505	**B1ACCF000063**	**TRANSISTOR**	**[M]**
Q506	**B1GCCFGA0005**	**TRANSISTOR**	**[M]**
Q507	**KTC3199GRTA**	**TRANSISTOR**	**[M]**
Q508	**B1AAKD000009**	**TRANSISTOR**	**[M]**
Q512	**B1AAGC000007**	**TRANSISTOR**	**[M]**
Q513	**B1AAGC000007**	**TRANSISTOR**	**[M]**
Q514	**B1AAGC000007**	**TRANSISTOR**	**[M]**
Q610	**KTC3199GRTA**	**TRANSISTOR**	**[M]**
Q611	**KTC3199GRTA**	**TRANSISTOR**	**[M]**
Q612	**KTC3199GRTA**	**TRANSISTOR**	**[M]**
Q614	**B1GACFGG0004**	**TRANSISTOR**	**[M]**
Q615	**KTA12710YTA**	**TRANSISTOR**	**[M]**
Q616	**KTC3199GRTA**	**TRANSISTOR**	**[M]**
Q617	**KTA12710YTA**	**TRANSISTOR**	**[M]**
Q618	**B1GACFLL0007**	**TRANSISTOR**	**[M]**
Q619	**B1GACFLL0007**	**TRANSISTOR**	**[M]**
Q701	**B1ADCF000001**	**TRANSISTOR**	**[M]**
Q950	**B1BACD000017**	**TRANSISTOR**	**[M]**
Q951	**KTA12710YTA**	**TRANSISTOR**	**[M]**

Ref. No.	Part No.	Part Name & Description	Remarks
Q952	KRC102MTA	TRANSISTOR	[M]
Q953	B1AAGC000007	TRANSISTOR	[M]
Q1001	B1ABCF000131	TRANSISTOR	[M]
Q1003	B1AAGC000007	TRANSISTOR	[M]
Q1004	B1AAGC000007	TRANSISTOR	[M]
Q1005	B1AAGC000007	TRANSISTOR	[M]
Q1007	B1ABCF000131	TRANSISTOR	[M]
Q1012	B1ABEB000001	TRANSISTOR	[M]
Q1013	B1ABEB000001	TRANSISTOR	[M]
Q1014	B1ABCF000011	TRANSISTOR	[M]
Q1015	B1ABCF000011	TRANSISTOR	[M]
Q1016	B1GDCFJJ0023	TRANSISTOR	[M]
Q1017	B1AARC000002	TRANSISTOR	[M]
Q1020	B1ABEB000001	TRANSISTOR	[M]
Q1021	B1ABEB000001	TRANSISTOR	[M]
		DIODES	
D1	SVC211SPA-AL	DIODE	[M]
D2	B0BA4R600003	DIODE	[M]
D2	SVC211SPA-AL	DIODE	[M]
D3	SVC211SPA-AL	DIODE	[M]
D101	B0BC5R000009	DIODE	[M]
D201	MA2J72800L	DIODE	[M]
D301	B0BC7R500001	DIODE	[M]
D302	B0ACCK000005	DIODE	[M]
D303	B0ADCJ000020	DIODE	[M]
D304	B0ADCJ000020	DIODE	[M]
D305	B0ADCJ000020	DIODE	[M]
D306	B0EAKM000117	DIODE	[M]
D307	B0ACCK000005	DIODE	[M]
D308	B0ACCK000005	DIODE	[M]
D309	B0EAKM000117	DIODE	[M]
D310	B0ACCK000005	DIODE	[M]
D312	B0ACCE000003	DIODE	[M]
D313	B0ACCE000003	DIODE	[M]
D314	MA2J72900L	DIODE	[M]
D324	B0ACCK000005	DIODE	[M]
D401	MA2J72800L	DIODE	[M]
D404	B0ADCC000002	DIODE	[M]
D405	MA2J72800L	DIODE	[M]
D501	B0BA9R600002	DIODE	[M]
D502	B0BA01500003	DIODE	[M]
D503	B0BA01400041	DIODE	[M]
D504	B0AACK000004	DIODE	[M]
D505	B0EAKM000125	DIODE	[M]
D507	B0EAKM000125	DIODE	[M]
D508	B0BA5R600016	DIODE	[M]
D509	B0BA9R600002	DIODE	[M]
D513	B0AACK000004	DIODE	[M]
D600	B3AAA0000583	DIODE	[M]
D613	B0BA5R600016	DIODE	[M]
D620	B0AACK000004	DIODE	[M]
D929	B3AAA0000583	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
D950	B0EAMM000038	DIODE	[M]
D951	B0EAMM000038	DIODE	[M]
D951	MA2C16500E	DIODE	[M]
D952	B0EAMM000038	DIODE	[M]
D953	B0EAMM000038	DIODE	[M]
D954	B0EAKM000125	DIODE	[M]
D955	B0EAKM000125	DIODE	[M]
D956	B0EAKM000125	DIODE	[M]
D957	B0EAKM000125	DIODE	[M]
D958	B0EAKM000125	DIODE	[M]
D959	B0EAKM000125	DIODE	[M]
D960	MAZ42700LF	DIODE	[M]
D961	B0EAKM000122	DIODE	[M]
D962	B0EAKM000122	DIODE	[M]
D963	B0EAKM000122	DIODE	[M]
D964	B0BA6R600008	DIODE	[M]
D965	B0AACK000004	DIODE	[M]
D966	B0EAKM000122	DIODE	[M]
D971	MA2C16500E	DIODE	[M]
D1003	B0ACCK000005	DIODE	[M]
D1004	B0BC3R700004	DIODE	[M]
		VARIABLE RESISTORS	
VR600	EVEKE2F3524M	VR VOLUME JOG	[M]
		SWITCHES	
S601	EVQ21405R	SW OPEN/ CLOSE	[M]
S602	EVQ21405R	SW CD 1	[M]
S603	EVQ21405R	SW CD 2	[M]
S604	EVQ21405R	SW CD 3	[M]
S605	EVQ21405R	SW CD 4	[M]
S606	EVQ21405R	SW CD 5	[M]
S612	EVQ21405R	SW POWER	[M]
S613	EVQ21405R	SW SSEQ	[M]
S614	EVQ21405R	SW PRESET	[M]
S615	EVQ21405R	SW REC	[M]
S616	EVQ21405R	SW DECK 1/2	[M]
S701	RSH1A043-U	SW REST	[M]
S901	EVQ21405R	SW REW	[M]
S902	EVQ21405R	SW TUNER	[M]
S903	EVQ21405R	SW CD	[M]
S904	EVQ21405R	SW FF	[M]
S905	EVQ21405R	SW STOP	[M]
S906	EVQ21405R	SW DECK 2 OPEN	[M]
S907	EVQ21405R	SW TAPE	[M]
S908	EVQ21405R	SW AUX	[M]
S909	EVQ21405R	SW DECK 1 OPEN	[M]
S910	EVQ21405R	SW DISPLAY	[M]
S951	RSH1A018-3U	SW MODE	[M]
S952	RSH1A019-2U	SW HALF	[M]
S971	RSH1A018-3U	SW MODE	[M]
S972	RSH1A019-2U	SW HALF	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
S975	RSH1A019-2U	SW RECINH_F	[M]
		SWITCHES	
SW1	RSH1A032-U	SW PUSH	[M]
SW2	RSH1A032-U	SW PUSH	[M]
SW3	RSH1A005-1U	SW OPEN	[M]
SW4	RSH1A91ZA-A	SW CD	[M]
SW5	K0L1BB000005	SW LOAD	[M]
		CONNECTORS	
CN1	K1MN14A00049	14P FFC CONNECTOR	[M]
CN300	K1KB12B00036	12P CONNECTOR	[M]
CN301	K1KB12B00036	12P CONNECTOR	[M]
CN302	K1MN30A00046	30P FFC CONNECTOR	[M]
CN303	RJS1A9417	FFC CONNECTOR	[M]
CN304	RJS1A9414-1	14P CONNECTOR	[M]
CN309	RJS1A9414-1	14P CONNECTOR	[M]
CN310	K1MN19A00026	FFC CONNECTOR	[M]
CN500	K1KA12A00184	12P CONNECTOR	[M]
CN501	K1KA12A00184	12P CONNECTOR	[M]
CN701	RJS2A8616	16P FPC CONNECTOR	[M]
CN702	RJS1A6719-1Q	19P FFC CONNECTOR	[M]
CN900	RJT071K11	CONNECTOR	[M]
CN950	RJT119W09V	9P CONNECTOR	[M]
CN951	K1KA09A00047	9P CONNECTOR	[M]
CN971	K1MN10B00104	10P FFC CONNECTOR	[M]
CN1001	K1MN14B00058	14P CONNECTOR	[M]
CP600	K1MN10B00104	10P FFC CONNECTOR	[M]
CP601	RJS1A9417	FFC CONNECTOR	[M]
CP602	K1MN30A00046	30P FFC CONNECTOR	[M]
CP900	RJU071H11M	CONNECTOR	[M]
CS1001	RJS1A6805-J	5P CONNECTOR	[M]
CS1002	RJS1A6805-J	5P CONNECTOR	[M]
		COILS & TRANSFORMERS	
L1	RLQZP1R2KT-Y	COIL	[M]
L2	RLQZPR47KT-Y	COIL	[M]
L303	G0C101JA0030	INDUCTOR	[M]
L304	RLQB3R3KT-1Y	COIL	[M]
L305	J0JBC0000019	CHIP INDUCTOR	[M]
L601	RLQB101KT-1Y	COIL	[M]
L602	RLQZP101KT-Y	AXIAL COIL	[M]
L603	RLQZP101KT-Y	AXIAL COIL	[M]
L609	RLQZP100KT-Y	AXIAL COIL	[M]
L610	RLQB100KT-1Y	COIL	[M]
L1001	G0C470JA0030	RF CHOKE COIL	[M]
L1002	7L1A62N	BIAS OSC COIL	[M]
T950	G4C7AFD00009	MAIN TRANSFORMER	[M] ⚠

Ref. No.	Part No.	Part Name & Description	Remarks
T951	RTP1H3E002	BACK UP TRANSFORMER	[M] ⚠
		COMPONENT COMBINATION	
Z101	G0ZZ00002194	COIL	[M]
Z102	G2BAE0000003	AM IF BLOCK	[M]
Z600	B3RAB0000025	REMOTE SENSOR	[M]
Z950	ERZV10V511CS	ZENER	[M] ⚠
Z971	RGSD12A1445T	RADA RESISTOR	[M]
		CERAMIC FILTERS	
CF201	RLFFETWND01M	FM CF	[M]
CF202	RLFFETWND01M	FM CF	[M]
		RELAY	
RL950	RSY0040M-0	PRIMARY RELAY	[M] ⚠
		OSCILLATORS	
X102	RLFDFT22DD	DISCRIMINATOR	[M]
X103	RSXC7M20S05T	CRYSTAL OSCILLATOR	[M]
X301	H0A327200073	CRYSTAL OSCILLATOR	[M]
X303	H2A100500006	RESONATOR	[M]
X701	RSXB16M9J02T	CRYSTAL OSCILLATOR	[M]
		DISPLAY TUBE	
FL600	A2BD00000084	FL	[M]
		FUSE	
F1	XBA1C25NBAL	FUSE	[M] ⚠
		FUSE HOLDERS	
FC1	EYF52BC	FUSE HOLDER	[M]
FC2	EYF52BC	FUSE HOLDER	[M]
		FUSE PROTECTORS	
FP533	K5G400A00001	FUSE PROTECTOR	[M] ⚠
FP950	K5G402AA0002	FUSE PROTECTOR	[M] ⚠
FP951	K5G102AA0002	FUSE PROTECTOR	[M] ⚠
		HOLDERS	
H600	K1YZ09000002	WIRE HOLDER	[M]
H950	RJS1A5509	9P CABLE HOLDER	[M]
		JACKS	

		JACKS	

Ref. No.	Part No.	Part Name & Description	Remarks
JK101	RJH5414-1	JK ANTENNA	[M]
JK300	RJH2213N-2	JK 2P RCA	[M]
JK601	K2HC103A0023	JK SMALL SIGN	[M]
JK950	K2AB2B000002	JK AC INLET	[M] ⚠
JK952	K4BC04B00046	JK SPEAKER	[M]
		EARTH TERMINAL	
E500	SNE1004-2	EARTH TERMINAL	[M]
		WIRES	
W1	REZ1023-1	4P WIRE	[M]
W2	REZ1024	3P WIRE	[M]
W600	REXX0324	9P FLAT WIRE	[M]
W950	REXX0325	9P FLAT WIRE	[M]
W1002	RWJ0102050CK	M/MECHA MOTOR WIRE	[M]
		CHIP RESISTORS	
W480	ERJ3GEY0R00V	0 1/16W	[M]
W481	ERJ3GEY0R00V	0 1/16W	[M]
W482	ERJ3GEY0R00V	0 1/16W	[M]
W483	ERJ3GEY0R00V	0 1/16W	[M]
W484	ERJ3GEY0R00V	0 1/16W	[M]
W485	ERJ3GEY0R00V	0 1/16W	[M]
W486	ERJ3GEY0R00V	0 1/16W	[M]
		RESISTORS	
R1	ERDS2TJ102T	1K 1/4W	[M]
R1	ERDS2TJ104T	100K 1/4W	[M]
R2	ERDS2TJ104T	100K 1/4W	[M]
R3	ERDS2TJ221T	220 1/4W	[M]
R4	ERDS2TJ104T	100K 1/4W	[M]
R5	ERDS2TJ564T	560K 1/4W	[M]
R6	ERDS2TJ391T	390 1/4W	[M]
R7	ERDS2TJ272T	2.7K 1/4W	[M]
R8	ERDS2TJ684T	680K 1/4W	[M]
R9	ERDS2TJ391T	390 1/4W	[M]
R10	ERDS2TJ391T	390 1/4W	[M]
R11	ERDS2TJ684T	680K 1/4W	[M]
R101	ERJ3GEY0R00V	0 1/16W	[M]
R102	ERJ3GEYJ472V	4.7K 1/16W	[M]
R103	D0GB271JA002	270 1/16W	[M]
R104	ERJ3GEYJ102V	1K 1/16W	[M]
R105	ERJ3GEYJ471V	470 1/16W	[M]
R106	ERJ3GEYJ474V	470K 1/16W	[M]
R107	ERJ3GEYJ331V	330 1/16W	[M]
R110	ERJ3GEYJ102V	1K 1/16W	[M]
R111	ERJ3GEYJ391V	390 1/16W	[M]
R112	ERJ3GEYJ104V	100K 1/16W	[M]
R113	ERJ3GEYJ103V	10K 1/16W	[M]

R113	ERJ3GEYJ103V	10K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R114	D0GB562JA002	5.6K 1/16W	[M]
R115	ERJ3GEYJ561V	560 1/16W	[M]
R116	ERJ3GEYJ102V	1K 1/16W	[M]
R117	ERJ3GEYJ473V	47K 1/16W	[M]
R118	D0GB332JA002	3.3K 1/16W	[M]
R119	D0GB332JA002	3.3K 1/16W	[M]
R120	ERJ3GEYJ473V	47K 1/16W	[M]
R121	ERJ3GEYJ223V	22K 1/16W	[M]
R122	D0GB272JA002	2.7K 1/16W	[M]
R123	D0GB683JA002	68K 1/16W	[M]
R124	ERJ3GEYJ330V	33 1/16W	[M]
R125	ERJ3GEYJ471V	470 1/16W	[M]
R126	ERJ3GEYJ102V	1K 1/16W	[M]
R127	ERJ3GEYJ471V	470 1/16W	[M]
R128	D0GB820JA019	82 1/16W	[M]
R129	D0GB273JA002	27K 1/16W	[M]
R130	ERJ3GEYJ103V	10K 1/16W	[M]
R131	D0GB121JA002	120 1/16W	[M]
R132	ERJ3GEYJ103V	10K 1/16W	[M]
R133	ERJ3GEYJ102V	1K 1/16W	[M]
R134	ERJ3GEYJ471V	470 1/16W	[M]
R135	ERJ3GEYJ102V	1K 1/16W	[M]
R136	ERJ3GEYJ102V	1K 1/16W	[M]
R137	ERJ3GEYJ102V	1K 1/16W	[M]
R138	D0GB332JA002	3.3K 1/16W	[M]
R141	ERJ3GEYJ682V	6.8K 1/16W	[M]
R142	ERJ3GEYJ682V	6.8K 1/16W	[M]
R143	ERJ3GEYJ223V	22K 1/16W	[M]
R144	D0GB121JA002	120 1/16W	[M]
R145	ERJ3GEYJ104V	100K 1/16W	[M]
R146	ERJ3GEYJ104V	100K 1/16W	[M]
R151	D0GB820JA019	82 1/16W	[M]
R152	ERJ3GEY0R00V	0 1/16W	[M]
R201	ERJ3GEYJ103V	10K 1/16W	[M]
R202	D0GB332JA002	3.3K 1/16W	[M]
R203	D0GB1R0JA002	1 1/16W	[M]
R204	ERJ3GEYJ330V	33 1/16W	[M]
R205	ERJ3GEYJ330V	33 1/16W	[M]
R206	ERJ3GEYJ330V	33 1/16W	[M]
R207	ERJ3GEYJ330V	33 1/16W	[M]
R208	D0GB332JA002	3.3K 1/16W	[M]
R209	ERJ3GEYJ561V	560 1/16W	[M]
R210	D0GB820JA019	82 1/16W	[M]
R211	D0GB562JA002	5.6K 1/16W	[M]
R212	ERJ3GEYJ102V	1K 1/16W	[M]
R213	ERJ3GEYJ473V	47K 1/16W	[M]
R214	ERJ3GEYJ102V	1K 1/16W	[M]
R215	ERJ3GEYJ473V	47K 1/16W	[M]
R216	ERJ3GEYJ104V	100K 1/16W	[M]
R217	ERJ3GEYJ123V	12K 1/16W	[M]
R219	D0GB152JA002	1.5K 1/16W	[M]
R220	D0GB272JA002	2.7K 1/16W	[M]
R221	D0GB683JA002	68K 1/16W	[M]
R222	ERJ3GEYJ561V	560 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R223	ERJ3GEYJ222V	2.2K 1/16W	[M]
R224	ERJ3GEYJ472V	4.7K 1/16W	[M]
R225	ERJ3GEYJ473V	47K 1/16W	[M]
R226	D0GB332JA002	3.3K 1/16W	[M]
R227	D0GB393JA002	39K 1/16W	[M]
R228	ERJ3GEYJ222V	2.2K 1/16W	[M]
R229	ERJ3GEYJ103V	10K 1/16W	[M]
R230	ERJ3GEYJ102V	1K 1/16W	[M]
R231	ERJ3GEYJ104V	100K 1/16W	[M]
R232	ERJ3GEYJ222V	2.2K 1/16W	[M]
R233	ERJ3GEYJ472V	4.7K 1/16W	[M]
R234	ERJ3GEYJ104V	100K 1/16W	[M]
R235	D0GB152JA002	1.5K 1/16W	[M]
R240	ERJ3GEY0R00V	0 1/16W	[M]
R244	ERJ3GEY0R00V	0 1/16W	[M]
R245	ERDS2TJ562T	5.6K 1/4W	[M]
R245	ERJ3GEYJ221V	220 1/16W	[M]
R246	ERDS2TJ153T	15K 1/4W	[M]
R247	ERDS2TJ562T	5.6K 1/4W	[M]
R248	D0GB4R7JA008	4.7 1/16W	[M]
R250	ERDS2TJ683T	68K 1/4W	[M]
R251	ERDS2TJ154T	150K 1/4W	[M]
R255	ERDS1FVJ100T	10 1/2W	[M]
R255	ERJ3GEYJ104V	100K 1/16W	[M]
R256	D0GB152JA002	1.5K 1/16W	[M]
R279	ERJ3GEYJ822V	8.2K 1/16W	[M]
R301	ERJ3GEYJ472V	4.7K 1/16W	[M]
R302	ERJ3GEYJ103V	10K 1/16W	[M]
R303	ERDS1FVJ270T	27 1/2W	[M]
R305	ERJ3GEYJ682V	6.8K 1/16W	[M]
R307	D0GB122JA019	1.2K 1/16W	[M]
R308	D0GB122JA019	1.2K 1/16W	[M]
R309	D0GB273JA002	27K 1/16W	[M]
R310	D0GB563JA002	56K 1/16W	[M]
R312	ERJ3GEYJ104V	100K 1/16W	[M]
R313	ERJ3GEYJ472V	4.7K 1/16W	[M]
R314	ERJ3GEYJ472V	4.7K 1/16W	[M]
R318	ERJ3GEY0R00V	0 1/16W	[M]
R320	ERJ3GEY0R00V	0 1/16W	[M]
R323	ERDS1FVJ150T	15 1/2W	[M]
R324	ERD2FCVG120T	12 1/4W	[M]
R325	ERJ3GEYJ103V	10K 1/16W	[M]
R326	D0GB101JA002	100 1/16W	[M]
R327	ERJ3GEYJ102V	1K 1/16W	[M]
R328	ERJ3GEYJ222V	2.2K 1/16W	[M]
R329	ERJ3GEYJ331V	330 1/16W	[M]
R332	D0GB101JA002	100 1/16W	[M]
R337	ERJ3GEYJ102V	1K 1/16W	[M]
R338	ERJ3GEYJ102V	1K 1/16W	[M]
R340	ERJ3GEYJ103V	10K 1/16W	[M]
R343	ERJ3GEYJ103V	10K 1/16W	[M]
R344	ERJ3GEYJ223V	22K 1/16W	[M]
R345	ERJ3GEYJ123V	12K 1/16W	[M]
R346	ERJ3GEYJ223V	22K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R347	**ERJ3GEYJ123V**	**12K 1/16W**	**[M]**
R348	**ERJ3GEYJ221V**	**220 1/16W**	**[M]**
R349	**ERJ3GEYJ102V**	**1K 1/16W**	**[M]**
R350	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R351	**ERJ3GEYJ221V**	**220 1/16W**	**[M]**
R352	**ERJ3GEYJ102V**	**1K 1/16W**	**[M]**
R353	**ERJ3GEYJ822V**	**8.2K 1/16W**	**[M]**
R354	**D0GB101JA002**	**100 1/16W**	**[M]**
R355	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R356	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R358	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R359	**ERJ3GEYJ472V**	**4.7K 1/16W**	**[M]**
R360	**ERJ3GEYJ472V**	**4.7K 1/16W**	**[M]**
R361	**ERJ3GEYJ102V**	**1K 1/16W**	**[M]**
R362	**ERJ3GEYJ102V**	**1K 1/16W**	**[M]**
R363	**ERJ3GEYJ102V**	**1K 1/16W**	**[M]**
R364	**ERJ3GEYJ102V**	**1K 1/16W**	**[M]**
R365	**ERJ3GEYJ102V**	**1K 1/16W**	**[M]**
R366	**ERJ3GEYJ102V**	**1K 1/16W**	**[M]**
R367	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R368	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R369	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R380	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R382	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R383	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R384	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R385	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R386	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R389	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R390	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R391	**ERJ3GEYJ472V**	**4.7K 1/16W**	**[M]**
R392	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R393	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R394	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R395	**ERJ3GEYJ473V**	**47K 1/16W**	**[M]**
R396	**ERJ3GEYJ473V**	**47K 1/16W**	**[M]**
R399	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R400	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R401	**ERJ3GEYJ103V**	**10K 1/16W**	**[M]**
R402	**D0GB332JA002**	**3.3K 1/16W**	**[M]**
R403	**D0GB1R0JA002**	**1 1/16W**	**[M]**
R404	**ERJ3GEYJ330V**	**33 1/16W**	**[M]**
R405	**ERJ3GEYJ330V**	**33 1/16W**	**[M]**
R406	**ERJ3GEYJ330V**	**33 1/16W**	**[M]**
R407	**ERJ3GEYJ330V**	**33 1/16W**	**[M]**
R408	**D0GB332JA002**	**3.3K 1/16W**	**[M]**
R409	**ERJ3GEYJ561V**	**560 1/16W**	**[M]**
R410	**D0GB820JA019**	**82 1/16W**	**[M]**
R411	**D0GB562JA002**	**5.6K 1/16W**	**[M]**
R412	**ERJ3GEYJ102V**	**1K 1/16W**	**[M]**
R413	**ERJ3GEYJ473V**	**47K 1/16W**	**[M]**
R414	**ERJ3GEYJ102V**	**1K 1/16W**	**[M]**
R415	**ERJ3GEYJ473V**	**47K 1/16W**	**[M]**
R416	**ERJ3GEYJ104V**	**100K 1/16W**	**[M]**

Ref. No.	Part No.	Part Name & Description	Remarks
R417	ERJ3GEYJ123V	12K 1/16W	[M]
R419	D0GB152JA002	1.5K 1/16W	[M]
R420	D0GB272JA002	2.7K 1/16W	[M]
R421	D0GB683JA002	68K 1/16W	[M]
R422	ERJ3GEYJ561V	560 1/16W	[M]
R423	ERJ3GEYJ222V	2.2K 1/16W	[M]
R424	ERJ3GEYJ472V	4.7K 1/16W	[M]
R425	ERJ3GEYJ473V	47K 1/16W	[M]
R426	D0GB332JA002	3.3K 1/16W	[M]
R427	D0GB393JA002	39K 1/16W	[M]
R428	ERJ3GEYJ222V	2.2K 1/16W	[M]
R429	ERJ3GEYJ103V	10K 1/16W	[M]
R430	ERJ3GEYJ102V	1K 1/16W	[M]
R431	ERJ3GEYJ104V	100K 1/16W	[M]
R432	ERJ3GEYJ222V	2.2K 1/16W	[M]
R433	ERJ3GEYJ472V	4.7K 1/16W	[M]
R434	ERJ3GEYJ104V	100K 1/16W	[M]
R435	D0GB152JA002	1.5K 1/16W	[M]
R440	ERJ3GEY0R00V	0 1/16W	[M]
R444	ERJ3GEY0R00V	0 1/16W	[M]
R445	ERDS2TJ562T	5.6K 1/4W	[M]
R445	ERJ3GEYJ221V	220 1/16W	[M]
R446	ERJ3GEYJ223V	22K 1/16W	[M]
R447	ERDS2TJ562T	5.6K 1/4W	[M]
R448	D0GB4R7JA008	4.7 1/16W	[M]
R448	ERDS2TJ153T	15K 1/4W	[M]
R449	ERDS2TJ683T	68K 1/4W	[M]
R450	ERDS2TJ334T	330K 1/4W	[M]
R450	ERJ3GEYJ472V	4.7K 1/16W	[M]
R451	ERDS2TJ154T	150K 1/4W	[M]
R452	ERJ3GEYJ104V	100K 1/16W	[M]
R453	ERJ3GEYJ102V	1K 1/16W	[M]
R454	ERJ3GEYJ472V	4.7K 1/16W	[M]
R455	ERDS1FVJ100T	10 1/2W	[M]
R455	ERJ3GEYJ104V	100K 1/16W	[M]
R456	D0GB152JA002	1.5K 1/16W	[M]
R461	ERJ3GEYJ102V	1K 1/16W	[M]
R462	ERJ3GEYJ102V	1K 1/16W	[M]
R463	D0GB101JA002	100 1/16W	[M]
R468	ERJ3GEYJ102V	1K 1/16W	[M]
R469	ERJ3GEYJ823V	82K 1/16W	[M]
R471	ERJ3GEYJ334V	330K 1/16W	[M]
R472	D0GB272JA002	2.7K 1/16W	[M]
R475	D0GB101JA002	100 1/16W	[M]
R476	D0GB333JA002	33K 1/16W	[M]
R479	ERJ3GEYJ822V	8.2K 1/16W	[M]
R480	ERJ3GEYJ822V	8.2K 1/16W	[M]
R501	ERDS2TJ103T	10K 1/4W	[M]
R502	ERDS2TJ223T	22K 1/4W	[M]
R503	ERDS2TJ123T	12K 1/4W	[M]
R504	ERDS2TJ473T	47K 1/4W	[M]
R505	ERDS2TJ473T	47K 1/4W	[M]
R506	ERDS2TJ104T	100K 1/4W	[M]
R507	ERDS1FVJ331T	330 1/2W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R508	**ERDS1FVJ331T**	**330 1/2W**	**[M]**
R509	**ERDS1FVJ331T**	**330 1/2W**	**[M]**
R510	**ERDS2TJ272T**	**2.7K 1/4W**	**[M]**
R511	**ERDS2TJ561T**	**560 1/4W**	**[M]**
R512	**ERDS2TJ272T**	**2.7K 1/4W**	**[M]**
R513	**ERDS2TJ332T**	**3.3K 1/4W**	**[M]**
R514	**ERDS2TJ332T**	**3.3K 1/4W**	**[M]**
R515	**ERDS1FVJ270T**	**27 1/2W**	**[M]**
R516	**ERDS1FVJ150T**	**15 1/2W**	**[M]**
R517	**ERDS1FVJ2R7T**	**2.7 1/2W**	**[M]**
R518	**ERDS1FVJ2R7T**	**2.7 1/2W**	**[M]**
R519	**ERDS1FVJ2R7T**	**2.7 1/2W**	**[M]**
R520	**ERDS1FVJ2R7T**	**2.7 1/2W**	**[M]**
R521	**ERDS1FVJ2R7T**	**2.7 1/2W**	**[M]**
R522	**ERDS2TJ332T**	**3.3K 1/4W**	**[M]**
R523	**ERDS2TJ471T**	**470 1/4W**	**[M]**
R524	**ERDS2TJ2R2T**	**2.2 1/4W**	**[M]**
R525	**ERDS2TJ2R2T**	**2.2 1/4W**	**[M]**
R526	**ERDS2TJ2R2T**	**2.2 1/4W**	**[M]**
R527	**ERDS2TJ2R2T**	**2.2 1/4W**	**[M]**
R528	**ERDS2TJ103T**	**10K 1/4W**	**[M]**
R529	**ERDS1FVJ331T**	**330 1/2W**	**[M]**
R530	**ERDS2TJ122T**	**1.2K 1/4W**	**[M]**
R531	**ERDS2TJ222T**	**2.2K 1/4W**	**[M]**
R532	**ERDS2TJ151T**	**150 1/4W**	**[M]**
R545	**ERDS2TJ563T**	**56K 1/4W**	**[M]**
R546	**ERDS2TJ563T**	**56K 1/4W**	**[M]**
R600	**ERDS2TJ472T**	**4.7K 1/4W**	**[M]**
R601	**ERDS2TJ102T**	**1K 1/4W**	**[M]**
R602	**ERDS2TJ102T**	**1K 1/4W**	**[M]**
R603	**ERDS2TJ122T**	**1.2K 1/4W**	**[M]**
R604	**ERDS2TJ182T**	**1.8K 1/4W**	**[M]**
R605	**ERDS2TJ222T**	**2.2K 1/4W**	**[M]**
R606	**ERDS2TJ272T**	**2.7K 1/4W**	**[M]**
R607	**ERDS2TJ472T**	**4.7K 1/4W**	**[M]**
R608	**ERDS2TJ682T**	**6.8K 1/4W**	**[M]**
R609	**ERDS2TJ103T**	**10K 1/4W**	**[M]**
R610	**ERDS2TJ223T**	**22K 1/4W**	**[M]**
R612	**ERDS2TJ102T**	**1K 1/4W**	**[M]**
R613	**ERDS2TJ102T**	**1K 1/4W**	**[M]**
R614	**ERDS2TJ122T**	**1.2K 1/4W**	**[M]**
R615	**ERDS2TJ182T**	**1.8K 1/4W**	**[M]**
R634	**ERDS2TJ103T**	**10K 1/4W**	**[M]**
R635	**ERDS2TJ103T**	**10K 1/4W**	**[M]**
R650	**ERDS2TJ471T**	**470 1/4W**	**[M]**
R651	**ERDS2TJ471T**	**470 1/4W**	**[M]**
R654	**ERDS2TJ221T**	**220 1/4W**	**[M]**
R655	**ERDS2TJ221T**	**220 1/4W**	**[M]**
R688	**ERDS2TJ2R7T**	**2.7 1/4W**	**[M]**
R689	**ERDS2TJ223T**	**22K 1/4W**	**[M]**
R691	**ERDS2TJ470T**	**47 1/4W**	**[M]**
R692	**ERD2FCVG470T**	**47 1/4W**	**[M]**
R693	**ERD2FCVG470T**	**47 1/4W**	**[M]**
R698	**ERDS2TJ102T**	**1K 1/4W**	**[M]**

Ref. No.	Part No.	Part Name & Description	Remarks
R699	ERDS2TJ102T	1K 1/4W	[M]
R700	ERDS2TJ2R7T	2.7 1/4W	[M]
R701	D0GB4R7JA008	4.7 1/16W	[M]
R701	ERDS2TJ223T	22K 1/4W	[M]
R702	ERDS2TJ123T	12K 1/4W	[M]
R702	ERJ3GEYJ472V	4.7K 1/16W	[M]
R704	ERJ3GEYJ102V	1K 1/16W	[M]
R705	D0GB393JA002	39K 1/16W	[M]
R706	ERJ3GEYJ102V	1K 1/16W	[M]
R707	ERJ3GEY0R00V	0 1/16W	[M]
R708	ERJ3GEY0R00V	0 1/16W	[M]
R709	ERJ3GEYJ104V	100K 1/16W	[M]
R711	ERJ3GEYJ823V	82K 1/16W	[M]
R712	D0GB821JA002	820 1/16W	[M]
R714	ERJ3GEYJ221V	220 1/16W	[M]
R715	D0GB272JA002	2.7K 1/16W	[M]
R717	ERJ3GEYJ102V	1K 1/16W	[M]
R718	ERJ3GEYJ102V	1K 1/16W	[M]
R720	D0GB105JA002	1M 1/16W	[M]
R721	D0GB101JA002	100 1/16W	[M]
R723	D0GB562JA002	5.6K 1/16W	[M]
R725	ERJ3GEYJ561V	560 1/16W	[M]
R727	D0GB152JA002	1.5K 1/16W	[M]
R728	D0GB183JA002	18K 1/16W	[M]
R729	D0GB152JA002	1.5K 1/16W	[M]
R731	ERJ3GEYJ223V	22K 1/16W	[M]
R735	D0GB101JA002	100 1/16W	[M]
R736	D0GB100JA002	10 1/16W	[M]
R737	ERJ3GEYJ682V	6.8K 1/16W	[M]
R738	ERJ3GEYJ682V	6.8K 1/16W	[M]
R739	ERJ3GEYJ102V	1K 1/16W	[M]
R742	ERJ3GEYJ103V	10K 1/16W	[M]
R743	ERJ3GEYJ472V	4.7K 1/16W	[M]
R744	D0GB393JA002	39K 1/16W	[M]
R749	D0GB183JA002	18K 1/16W	[M]
R750	ERJ3GEYJ5R6V	5.6 1/16W	[M]
R753	D0GB100JA002	10 1/16W	[M]
R760	D0GB101JA002	100 1/16W	[M]
R761	ERJ3GEYJ103V	10K 1/16W	[M]
R762	ERJ3GEYJ103V	10K 1/16W	[M]
R763	ERJ3GEYJ103V	10K 1/16W	[M]
R801	D0GB106JA008	10M 1/16W	[M]
R802	ERJ3GEYJ223V	22K 1/16W	[M]
R803	ERJ3GEYJ223V	22K 1/16W	[M]
R804	ERJ3GEYJ334V	330K 1/16W	[M]
R805	ERJ3GEYJ472V	4.7K 1/16W	[M]
R806	ERJ3GEYJ472V	4.7K 1/16W	[M]
R807	ERJ3GEYJ681V	680 1/16W	[M]
R808	ERJ3GEYJ473V	47K 1/16W	[M]
R809	ERJ3GEYJ104V	100K 1/16W	[M]
R810	ERJ3GEYJ472V	4.7K 1/16W	[M]
R811	ERJ3GEYJ472V	4.7K 1/16W	[M]
R812	ERJ3GEYJ472V	4.7K 1/16W	[M]
R813	ERJ3GEYJ472V	4.7K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R814	ERJ3GEYJ472V	4.7K 1/16W	[M]
R815	ERJ3GEYJ474V	470K 1/16W	[M]
R816	ERJ3GEYJ474V	470K 1/16W	[M]
R817	ERJ3GEYJ681V	680 1/16W	[M]
R818	ERJ3GEYJ222V	2.2K 1/16W	[M]
R819	ERJ3GEYJ222V	2.2K 1/16W	[M]
R820	ERJ3GEYJ471V	470 1/16W	[M]
R884	D0GB101JA002	100 1/16W	[M]
R885	D0GB101JA002	100 1/16W	[M]
R886	D0GB101JA002	100 1/16W	[M]
R901	ERDS2TJ102T	1K 1/4W	[M]
R902	ERDS2TJ102T	1K 1/4W	[M]
R903	ERDS2TJ122T	1.2K 1/4W	[M]
R904	ERDS2TJ182T	1.8K 1/4W	[M]
R905	ERDS2TJ222T	2.2K 1/4W	[M]
R906	ERDS2TJ272T	2.7K 1/4W	[M]
R907	ERDS2TJ472T	4.7K 1/4W	[M]
R908	ERDS2TJ682T	6.8K 1/4W	[M]
R909	ERDS2TJ103T	10K 1/4W	[M]
R911	ERDS2TJ104T	100K 1/4W	[M]
R912	ERDS2TJ473T	47K 1/4W	[M]
R913	ERDS2TJ473T	47K 1/4W	[M]
R914	ERDS2TJ563T	56K 1/4W	[M]
R915	ERDS2TJ470T	47 1/4W	[M]
R916	ERDS2TJ104T	100K 1/4W	[M]
R917	ERDS2TJ563T	56K 1/4W	[M]
R918	ERDS2TJ470T	47 1/4W	[M]
R919	ERDS2TJ103T	10K 1/4W	[M]
R920	ERDS2TJ103T	10K 1/4W	[M]
R921	ERDS2TJ103T	10K 1/4W	[M]
R922	ERDS2TJ103T	10K 1/4W	[M]
R924	ERDS2TJ103T	10K 1/4W	[M]
R950	ERC12UGK335D	3.3M 1/2W	[M]
R951	ERDS2TJ332T	3.3K 1/4W	[M]
R952	ERDS2TJ102T	1K 1/4W	[M]
R952	ERDS2TJ821T	820 1/4W	[M]
R953	ERDS2TJ151T	150 1/4W	[M]
R953	ERDS2TJ393T	39K 1/4W	[M]
R954	ERDS1FVJ100T	10 1/2W	[M]
R955	ERDS1FVJ100T	10 1/2W	[M]
R956	ERDS1FVJ100T	10 1/2W	[M]
R957	ERDS2TJ103T	10K 1/4W	[M]
R958	ERDS2TJ103T	10K 1/4W	[M]
R959	ERD2FCVJ4R7T	4.7 1/4W	[M]
R960	ERDS2TJ472T	4.7K 1/4W	[M]
R961	ERDS2TJ151T	150 1/4W	[M]
R972	ERDS2TJ821T	820 1/4W	[M]
R973	ERDS2TJ393T	39K 1/4W	[M]
R975	ERDS2TJ182T	1.8K 1/4W	[M]
R976	ERDS2TJ221T	220 1/4W	[M]
R979	ERDS2TJ101T	100 1/4W	[M]
R988	ERDS2TJ103T	10K 1/4W	[M]
R989	ERDS2TJ103T	10K 1/4W	[M]
R1001	D0GB1R0JA002	1 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R1003	ERJ3GEYJ103V	10K 1/16W	[M]
R1004	D0GB152JA002	1.5K 1/16W	[M]
R1005	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1006	ERJ3GEYJ102V	1K 1/16W	[M]
R1007	ERD25FVJ4R7T	4.7 1/4W	[M]
R1009	D0GB183JA002	18K 1/16W	[M]
R1010	D0GB183JA002	18K 1/16W	[M]
R1011	ERJ3GEYJ103V	10K 1/16W	[M]
R1012	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1013	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1014	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1015	ERJ3GEYJ470V	47 1/16W	[M]
R1016	ERJ3GEYJ470V	47 1/16W	[M]
R1017	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1018	D0GB392JA002	3.9K 1/16W	[M]
R1019	D0GB392JA002	3.9K 1/16W	[M]
R1022	ERJ3GEYJ103V	10K 1/16W	[M]
R1026	ERJ3GEYJ102V	1K 1/16W	[M]
R1028	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1029	D0GB475JA008	4.7M 1/16W	[M]
R1030	D0GB101JA002	100 1/16W	[M]
R1031	D0GB273JA002	27K 1/16W	[M]
R1032	ERJ3GEYJ103V	10K 1/16W	[M]
R1035	ERJ3GEYJ103V	10K 1/16W	[M]
R1038	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1039	ERJ3GEYJ153V	15K 1/16W	[M]
R1040	ERJ3GEY0R00V	0 1/16W	[M]
R1045	ERJ3GEYJ104V	100K 1/16W	[M]
R1046	ERJ3GEYJ104V	100K 1/16W	[M]
R1047	ERJ3GEYJ102V	1K 1/16W	[M]
R1048	ERJ3GEYJ102V	1K 1/16W	[M]
R1049	D0GB105JA002	1M 1/16W	[M]
R1050	D0GB105JA002	1M 1/16W	[M]
R1051	ERJ3GEYJ221V	220 1/16W	[M]
R1052	ERJ3GEYJ221V	220 1/16W	[M]
R1053	ERJ3GEYJ681V	680 1/16W	[M]
R1054	ERJ3GEYJ681V	680 1/16W	[M]
R1055	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1056	ERJ3GEYJ221V	220 1/16W	[M]
R1057	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1058	D0GB272JA002	2.7K 1/16W	[M]
R1059	ERJ3GEYJ103V	10K 1/16W	[M]
R1060	ERJ3GEYJ391V	390 1/16W	[M]
R1061	ERJ3GEY0R00V	0 1/16W	[M]
R1084	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1085	ERJ3GEYJ473V	47K 1/16W	[M]
R1086	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1087	ERJ3GEYJ473V	47K 1/16W	[M]
R1090	ERJ3GEYJ221V	220 1/16W	[M]
R1091	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1092	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1093	ERJ3GEYJ102V	1K 1/16W	[M]
R1094	ERJ3GEYJ102V	1K 1/16W	[M]
R1095	ERJ3GEYJ104V	100K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R1096	ERJ3GEYJ104V	100K 1/16W	[M]
R1097	ERJ3GEYJ103V	10K 1/16W	[M]
R1098	ERJ3GEYJ103V	10K 1/16W	[M]
		CAPACITORS	
C1	ECBT1H5R6KC5	5.6P 50V	[M]
C1	ECEA1CKA101B	100 16V	[M]
C2	ECBT1E103ZF5	0.01 25V	[M]
C2	RCBS1H102KBY	1000P 50V	[M]
C3	ECBT1H2R2KC5	2.2P 50V	[M]
C4	ECBT1H181KB5	180P 50V	[M]
C5	ECBT1H5R6KC5	5.6P 50V	[M]
C6	ECBT1H3R3KC5	3.3P 50V	[M]
C7	ECBT1H4R7KC5	4.7P 50V	[M]
C8	ECBT1H3R3KC5	3.3P 50V	[M]
C9	ECBT1H2R2KC5	2.2P 50V	[M]
C10	ECBT1H180JC5	18P 50V	[M]
C11	RCBS1H102KBY	1000P 50V	[M]
C101	ECJ1VB1E103K	0.01 25V	[M]
C102	ECEA1CKA100B	10 16V	[M]
C103	ECJ1VB1E103K	0.01 25V	[M]
C104	ECJ1VB1H102K	1000P 50V	[M]
C106	ECJ1VB1E103K	0.01 25V	[M]
C107	F1H1E473A062	0.047 25V	[M]
C108	ECJ1VC1H080D	8P 50V	[M]
C109	ECJ1VB1H102K	1000P 50V	[M]
C110	ECJ1VB1E103K	0.01 25V	[M]
C111	ECEA1HKA4R7B	4.7 50V	[M]
C112	ECJ1VB1E103K	0.01 25V	[M]
C113	ECJ1VB1H102K	1000P 50V	[M]
C114	ECEA1HKA3R3B	3.3 50V	[M]
C115	ECEA1HKA4R7B	4.7 50V	[M]
C116	ECJ1VB1C333K	0.033 16V	[M]
C117	ECJ1VB1E103K	0.01 25V	[M]
C118	ECJ1VB1E103K	0.01 25V	[M]
C119	F0A2A681A010	680P 100V	[M]
C120	ECEA1CKA100B	10 16V	[M]
C121	ECEA1HKAR47B	0.47 50V	[M]
C122	ECEA1HKA010B	1 50V	[M]
C123	ECEA1HKA010B	1 50V	[M]
C124	ECJ1VC1H101K	100P 50V	[M]
C125	ECEA1CKA220B	22 16V	[M]
C126	ECJ2VF1C105Z	1 16V	[M]
C127	ECEA1CKA220B	22 16V	[M]
C129	ECEA0JKA101B	100 6.3V	[M]
C130	ECEA0JKA101B	100 6.3V	[M]
C131	ECJ1VC1H151J	150P 50V	[M]
C132	ECJ1VB1H102K	1000P 50V	[M]
C133	ECJ1VC1H270J	27P 50V	[M]
C134	ECJ1VC1H270J	27P 50V	[M]
C136	ECJ1VB1H102K	1000P 50V	[M]
C137	ECJ1VB1H332K	3300P 50V	[M]
C138	ECJ1VB1E103K	0.01 25V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C139	ECEA1HKA4R7B	4.7 50V	[M]
C141	ECEA1HKA010B	1 50V	[M]
C142	ECEA1HKA010B	1 50V	[M]
C143	ECJ1VB1H682K	6800P 50V	[M]
C144	ECJ1VB1H682K	6800P 50V	[M]
C147	ECJ1VB1H102K	1000P 50V	[M]
C148	ECJ1VB1E103K	0.01 25V	[M]
C149	ECUV1C104ZFV	0.1 16V	[M]
C201	ECJ1VB1H681K	680P 50V	[M]
C202	ECJ1VC1H101K	100P 50V	[M]
C203	ECJ1VB1H102K	1000P 50V	[M]
C204	ECJ1VB1H221K	220P 50V	[M]
C205	ECJ1VB1H221K	220P 50V	[M]
C206	ECEA1CKA100B	10 16V	[M]
C207	ECEA1CKA100B	10 16V	[M]
C208	ECEA1CKA100B	10 16V	[M]
C209	ECEA1CKA100B	10 16V	[M]
C211	ECEA1CKA100B	10 16V	[M]
C212	ECEA1CKA100B	10 16V	[M]
C213	ECEA1HKAR47B	0.47 50V	[M]
C214	ECEA1HKAR47B	0.47 50V	[M]
C215	F1J1E224A126	0.22 25V	[M]
C216	F1J1E224A126	0.22 25V	[M]
C217	ECJ1VB1H222K	2200P 50V	[M]
C218	ECEA1CKA100B	10 16V	[M]
C219	ECQV1H474JZ3	0.47 50V	[M]
C220	ECQV1H474JZ3	0.47 50V	[M]
C221	ECEA1CKA100B	10 16V	[M]
C222	ERJ3GEY0R00V	0 1/16W	[M]
C223	ECJ1VC1H101K	100P 50V	[M]
C224	ECEA1HKA010B	1 50V	[M]
C225	ECJ1VC1H101K	100P 50V	[M]
C226	ECJ1VC1H470J	47P 50V	[M]
C227	ECEA1CKA100B	10 16V	[M]
C228	ECEA1CKA100B	10 16V	[M]
C229	ECEA1HKAR68B	0.68 50V	[M]
C232	ERJ3GEY0R00V	0 1/16W	[M]
C240	ECBT1H471KB5	470P 50V	[M]
C240	ECJ1VB1H102K	1000P 50V	[M]
C242	ECBT1H821KB5	820P 50V	[M]
C244	F1D1H1040002	0.1 50V	[M]
C246	F1D1H1040002	0.1 50V	[M]
C248	ECEA1HKA010B	1 50V	[M]
C298	ECEA1CKA330B	33 16V	[M]
C302	ECJ1VB1E103K	0.01 25V	[M]
C303	ECJ1VB1H102K	1000P 50V	[M]
C304	ECEA1HKA010B	1 50V	[M]
C305	ECEA1CKA221B	220 16V	[M]
C306	ECEA1HKA010B	1 50V	[M]
C308	ECJ1VC1H121J	120P 50V	[M]
C309	ECEA1AKN100B	10 10V	[M]
C310	ECEA0JKA101B	100 6.3V	[M]
C311	ECEA0JKA101B	100 6.3V	[M]
C312	ECJ1VB1E103K	0.01 25V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C313	ECJ1VB1E103K	0.01 25V	[M]
C320	ECEA1AKA220B	22 10V	[M]
C321	ECJ1VB1H103K	0.01 50V	[M]
C323	ECUV1C104ZFV	0.1 16V	[M]
C324	ECUV1C104ZFV	0.1 16V	[M]
C325	ECJ1VC1H101K	100P 50V	[M]
C326	ECJ1VF1C474Z	0.47 16V	[M]
C328	ECJ1VC1H101K	100P 50V	[M]
C329	ECJ1VC1H101K	100P 50V	[M]
C330	ECJ1VC1H101K	100P 50V	[M]
C331	ECJ1VC1H101K	100P 50V	[M]
C332	ECJ1VC1H101K	100P 50V	[M]
C336	ECUV1H104KBV	0.1 50V	[M]
C338	ECJ1VB1E103K	0.01 25V	[M]
C339	ECJ1VB1E103K	0.01 25V	[M]
C350	ECJ1VC1H101K	100P 50V	[M]
C351	ECJ1VC1H101K	100P 50V	[M]
C352	ECJ1VC1H101K	100P 50V	[M]
C353	ECJ1VC1H101K	100P 50V	[M]
C354	ECJ1VC1H101K	100P 50V	[M]
C357	ECJ1VC1H102J	1000P 50V	[M]
C359	ECJ1VB1H102K	1000P 50V	[M]
C360	ECUV1H104KBV	0.1 50V	[M]
C361	ECJ1VC1H180J	18P 50V	[M]
C362	ECJ1VC1H180J	18P 50V	[M]
C363	ECJ1VB1H223K	0.022 50V	[M]
C364	F1H1H331A789	330P 50V	[M]
C366	F1H1H331A789	330P 50V	[M]
C369	ECJ1VC1H560J	56P 50V	[M]
C374	ECJ1VC1H560J	56P 50V	[M]
C380	ECJ1VB1H561K	560P 50V	[M]
C381	ECJ1VB1H561K	560P 50V	[M]
C383	ECJ1VB1H561K	560P 50V	[M]
C384	ECJ1VB1H561K	560P 50V	[M]
C385	ECJ1VB1H561K	560P 50V	[M]
C387	ECUV1H680JCV	68P 50V	[M]
C388	ECUV1H680JCV	68P 50V	[M]
C389	ECEA0JKA101B	100 6.3V	[M]
C391	ECEA1AKA101B	100 10V	[M]
C392	ECEA1HKA010B	1 50V	[M]
C395	ECEA1HKA100B	10 50V	[M]
C396	ECEA1HKA2R2B	2.2 50V	[M]
C397	RCE1AM102B	1000P 10V	[M]
C398	ECJ1VB1H102K	1000P 50V	[M]
C401	ECJ1VB1H681K	680P 50V	[M]
C402	ECJ1VC1H101K	100P 50V	[M]
C403	ECJ1VB1H102K	1000P 50V	[M]
C404	ECJ1VB1H221K	220P 50V	[M]
C405	ECJ1VB1H221K	220P 50V	[M]
C406	ECEA1CKA100B	10 16V	[M]
C407	ECEA1CKA100B	10 16V	[M]
C408	ECEA1CKA100B	10 16V	[M]
C409	ECEA1CKA100B	10 16V	[M]
C410	ECJ1VB1A224K	0.22 10V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C411	ECEA1CKA100B	10 16V	[M]
C412	ECEA1CKA100B	10 16V	[M]
C413	ECEA1HKAR47B	0.47 50V	[M]
C414	ECEA1HKAR47B	0.47 50V	[M]
C415	F1J1E224A126	0.22 25V	[M]
C416	F1J1E224A126	0.22 25V	[M]
C417	ECJ1VB1H222K	2200P 50V	[M]
C418	ECEA1CKA100B	10 16V	[M]
C419	ECQV1H474JZ3	0.47 50V	[M]
C420	ECQV1H474JZ3	0.47 50V	[M]
C421	ECEA1CKA100B	10 16V	[M]
C422	ERJ3GEY0R00V	0 1/16W	[M]
C423	ECJ1VC1H101K	100P 50V	[M]
C424	ECEA1HKA010B	1 50V	[M]
C425	ECJ1VC1H101K	100P 50V	[M]
C426	ECJ1VC1H470J	47P 50V	[M]
C427	ECEA1CKA100B	10 16V	[M]
C428	ECEA1CKA100B	10 16V	[M]
C429	ECEA1HKAR68B	0.68 50V	[M]
C432	ERJ3GEY0R00V	0 1/16W	[M]
C440	ECBT1H821KB5	820P 50V	[M]
C440	ECJ1VB1H102K	1000P 50V	[M]
C441	ECBT1H150JC5	15P 50V	[M]
C442	ECBT1H471KB5	470P 50V	[M]
C442	ECJ1VB1A224K	0.22 10V	[M]
C443	ECEA2AU100B	10 100V	[M]
C443	ECUV1H104KBV	0.1 50V	[M]
C444	ECJ1VB1H471K	470P 50V	[M]
C444	F1D1H1040002	0.1 50V	[M]
C446	ECEA1HKA010B	1 50V	[M]
C447	F1D1H1040002	0.1 50V	[M]
C450	ECBT1H150JC5	15P 50V	[M]
C450	ECEA1HKAR22B	0.22 50V	[M]
C451	ECEA1HKA010B	1 50V	[M]
C452	ECEA1HKA010B	1 50V	[M]
C497	ECEA1CKA100B	10 16V	[M]
C501	ECBT1H103KB5	0.01 50V	[M]
C502	ECEA0JKA221B	220 6.3V	[M]
C503	ECBT1H102KB5	1000P 50V	[M]
C504	ECKR1H103MD5	0.01 50V	[M]
C505	ECEA1CKA101B	100 16V	[M]
C506	ECKR1H103MD5	0.01 50V	[M]
C507	ECEA1CKA100B	10 16V	[M]
C508	ECEA1CKA100B	10 16V	[M]
C509	ECKR1H103MD5	0.01 50V	[M]
C510	ECA1EM101B	100 25V	[M]
C511	ECKR1H103MD5	0.01 50V	[M]
C512	ECEA1EKA330B	33 25V	[M]
C513	ECEA1EKA100B	10 25V	[M]
C514	ECKR1H103MD5	0.01 50V	[M]
C520	ECA1JM222B	2200 63V	[M]
C521	ECEA2AU100B	10 100V	[M]
C530	ECQV1H184JL3	0.18 50V	[M]
C540	ECA1JM222B	2200 63V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C620	ECBT1E223ZF5	0.022 25V	[M]
C621	ECBT1E223ZF5	0.022 25V	[M]
C637	ECBT1H103KB5	0.01 50V	[M]
C638	ECBT1H102KB5	1000P 50V	[M]
C639	ECEA0JKA470B	47 6.3V	[M]
C640	ECEA1HKA3R3B	3.3 50V	[M]
C641	ECEA1VKA220B	22 35V	[M]
C642	ECEA1VKA220B	22 35V	[M]
C669	ECBT1H101KB5	100P 50V	[M]
C671	F1D1H473A012	0.047 50V	[M]
C672	ECBT1H101KB5	100P 50V	[M]
C673	ECBT1H101KB5	100P 50V	[M]
C674	ECEA1EKA470B	47 25V	[M]
C675	F1D1H1040002	0.1 50V	[M]
C678	ECBT1H103KB5	0.01 50V	[M]
C681	ECBT1H101KB5	100P 50V	[M]
C682	ECBT1H101KB5	100P 50V	[M]
C701	ECEA0JKA330I	33 6.3V	[M]
C702	ECJ1VB0J474K	0.47 6.3V	[M]
C703	ECEA0JKA101I	100 6.3V	[M]
C704	ECUVNC104KBV	0.1 16V	[M]
C705	ECUVNC104ZFV	0.1 16V	[M]
C706	F1H0J105A002	1 6.3V	[M]
C707	ECJ1VB1C393K	0.039 16V	[M]
C710	ECJ1VB1H471K	470P 50V	[M]
C711	ECUVNC104KBV	0.1 16V	[M]
C712	ECUVNC104KBV	0.1 16V	[M]
C713	ECUVNC104KBV	0.1 16V	[M]
C714	ECEA0JKA101I	100 6.3V	[M]
C715	ECUV1C224KBV	0.22 16V	[M]
C716	ECJ1VB1H681K	680P 50V	[M]
C717	ECUVNC104ZFV	0.1 16V	[M]
C718	ECJ1VB1C823K	0.082 16V	[M]
C721	ECJ1VC1H120J	12P 50V	[M]
C722	ECJ1VC1H120J	12P 50V	[M]
C723	ECEA0JKA221I	220 6.3V	[M]
C724	ECUVNC104KBV	0.1 16V	[M]
C725	ECJ1VB1H102K	1000P 50V	[M]
C726	ECJ1VB1H102K	1000P 50V	[M]
C727	ECA1HAK010XI	1 50V	[M]
C728	ECA1HAK010XI	1 50V	[M]
C729	ECUVNC104KBV	0.1 16V	[M]
C730	ECUVNC104ZFV	0.1 16V	[M]
C731	ECEA0JKA221I	220 6.3V	[M]
C733	ECUVNC104KBV	0.1 16V	[M]
C734	ECEA1AKA221I	220 10V	[M]
C735	ECUVNC104ZFV	0.1 16V	[M]
C736	ECUVNC104ZFV	0.1 16V	[M]
C737	ECUVNC104ZFV	0.1 16V	[M]
C738	F1H1C473A088	0.047 16V	[M]
C739	ECJ1VB1H103K	0.01 50V	[M]
C740	ECUVNC104KBV	0.1 16V	[M]
C741	ECJ1VB1H102K	1000P 50V	[M]
C742	F1H1C473A088	0.047 16V	[M]

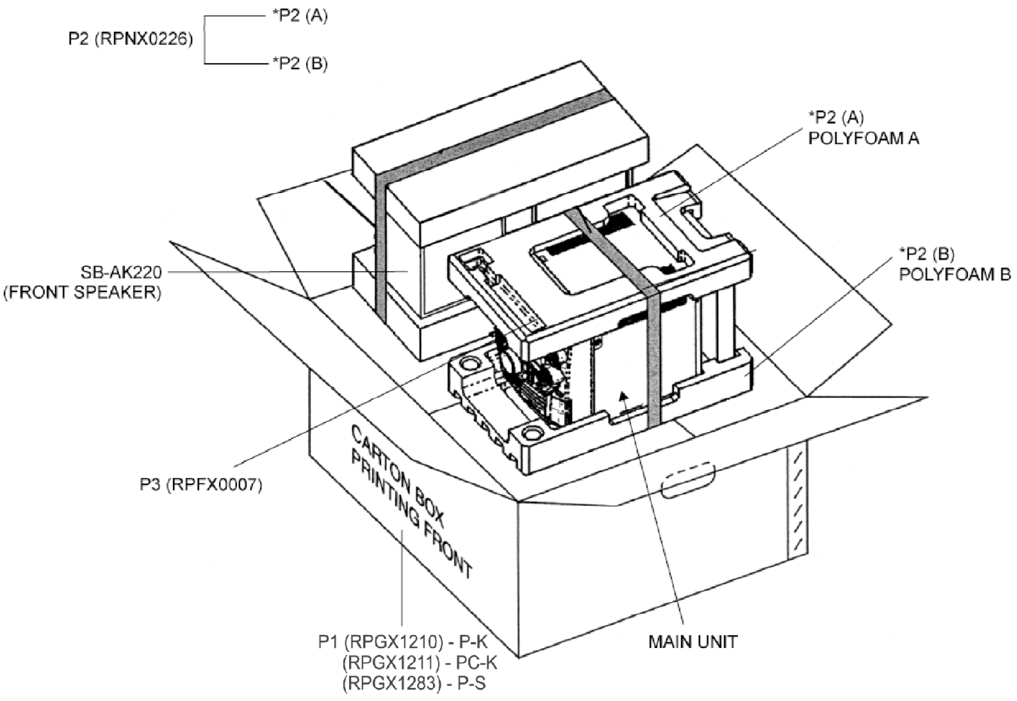
Ref. No.	Part No.	Part Name & Description	Remarks
C743	ECUVNC104ZFV	0.1 16V	[M]
C744	ECJ1VB1C153K	0.015 16V	[M]
C746	ECUVNC104KBV	0.1 16V	[M]
C747	ECJ1VB1H471K	470P 50V	[M]
C748	ECUVNC104KBV	0.1 16V	[M]
C749	F1H1H392A022	3900P 50V	[M]
C750	ECUVNC104KBV	0.1 16V	[M]
C751	ECUVNC104KBV	0.1 16V	[M]
C752	ECJ1VB1H103K	0.01 50V	[M]
C753	ECJ1VB1H471K	470P 50V	[M]
C755	ECUVNC104KBV	0.1 16V	[M]
C757	ECEA0JKA101I	100 6.3V	[M]
C758	ECUVNC104KBV	0.1 16V	[M]
C770	ECUVNC104KBV	0.1 16V	[M]
C780	ECUVNC104KBV	0.1 16V	[M]
C781	ECUVNC104KBV	0.1 16V	[M]
C782	ECUVNC104KBV	0.1 16V	[M]
C901	ECBT1H101KB5	100P 50V	[M]
C902	ECBT1H101KB5	100P 50V	[M]
C903	ECBT1H101KB5	100P 50V	[M]
C918	ECBT1H101KB5	100P 50V	[M]
C919	ECBT1H101KB5	100P 50V	[M]
C920	ECBT1H101KB5	100P 50V	[M]
C921	ECBT1H101KB5	100P 50V	[M]
C922	ECBT1H101KB5	100P 50V	[M]
C923	ECBT1H101KB5	100P 50V	[M]
C924	ECBT1H101KB5	100P 50V	[M]
C950	ECA1EM222B	2200 25V	[M]
C951	ECKR1H103ZF5	0.01 50V	[M]
C952	ECEA1AKA470B	47 10V	[M]
C953	ECKR1H103MD5	0.01 50V	[M]
C954	ECKR1H103ZF5	0.01 50V	[M]
C955	ECA1HM101B	100 50V	[M]
C956	ECA1JM101B	100 63V	[M]
C957	ECA2AM100B	10 100V	[M]
C958	ECKR1H103MD5	0.01 50V	[M]
C959	ECKR2H103ZF5	0.01 500V	[M]
C960	ECQE1104KF3	0.1 100V	[M]
C961	ECA1CM102B	1000 16V	[M]
C962	ECA1CM102B	1000 16V	[M]
C963	ECEA1VKA4R7B	4.7 35V	[M]
C1001	F1H1H103A753	0.01 50V	[M]
C1002	ECEA1HKN2R2B	2.2 50V	[M]
C1003	ECUV1H152KBV	1500P 50V	[M]
C1006	ECEA1HKA010B	1 50V	[M]
C1007	F0A2A472A015	4700P 100V	[M]
C1008	ECEA1HKA010B	1 50V	[M]
C1009	ECEA1CKA470B	47 16V	[M]
C1010	ECA1EM101B	100 25V	[M]
C1011	ECQV1H473JZ3	0.047 50V	[M]
C1012	ECJ1VB1H102K	1000P 50V	[M]
C1013	ECJ1VB1H102K	1000P 50V	[M]
C1014	ECJ1VB1H102K	1000P 50V	[M]
C1015	ECJ1VB1H102K	1000P 50V	[M]

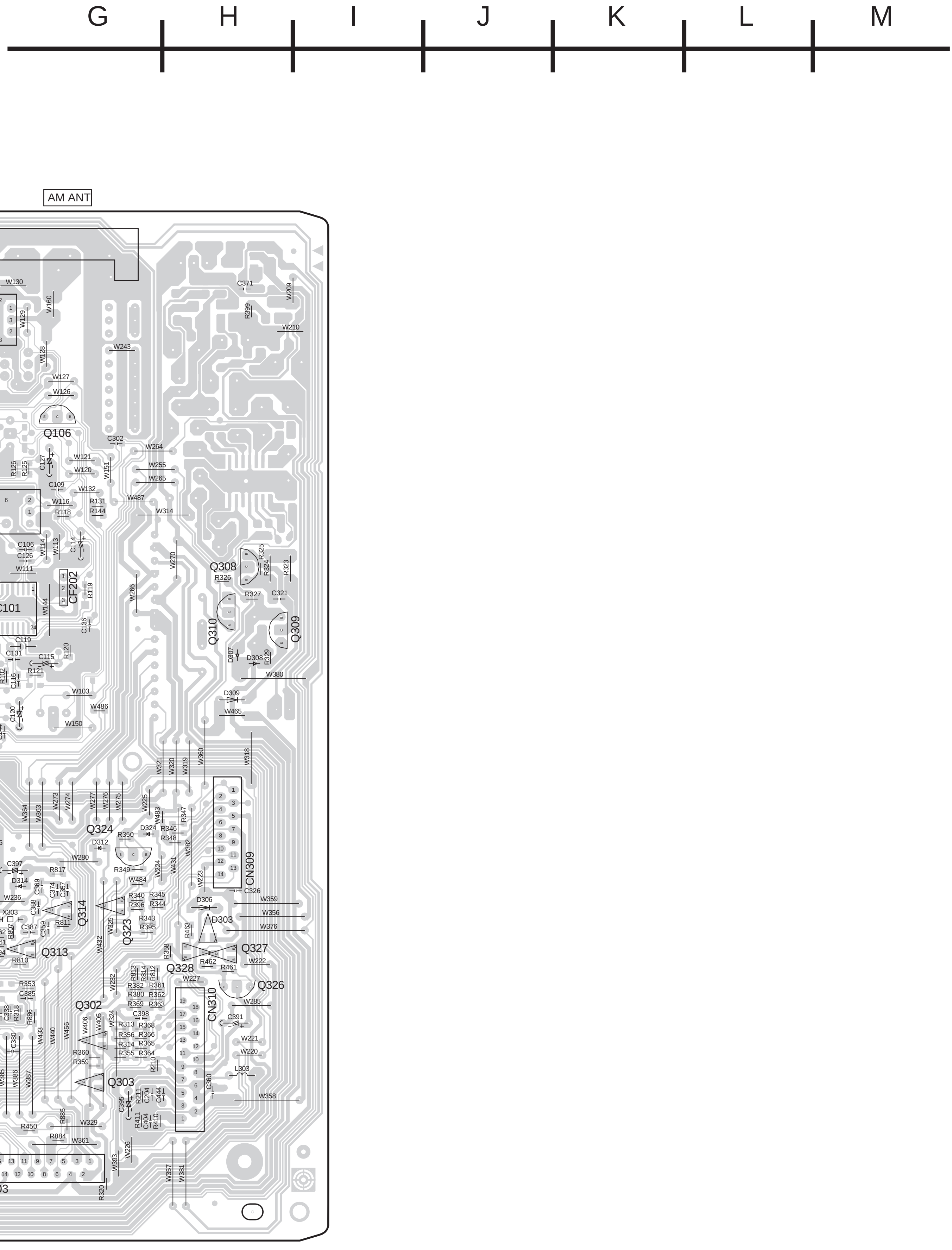
Ref. No.	Part No.	Part Name & Description	Remarks
C1016	**ECJ1VB1H222K**	**2200P 50V**	**[M]**
C1017	**ECJ1VB1H222K**	**2200P 50V**	**[M]**
C1018	**ECJ1VB1H103K**	**0.01 50V**	**[M]**
C1019	**ECJ1VB1H102K**	**1000P 50V**	**[M]**
C1020	**ECJ1VB1H471K**	**470P 50V**	**[M]**
C1021	**ECJ1VB1H471K**	**470P 50V**	**[M]**
C1022	**ECJ1VB1H102K**	**1000P 50V**	**[M]**
C1023	**ECJ1VB1H102K**	**1000P 50V**	**[M]**
C1026	**ECEA0JKA470B**	**47 6.3V**	**[M]**
C1027	**ECJ1VB1H102K**	**1000P 50V**	**[M]**
C1030	**ECEA1AKA101B**	**100 10V**	**[M]**
C1031	**ECEA1AKA101B**	**100 10V**	**[M]**
C1032	**F1C1C183A001**	**0.018 16V**	**[M]**
C1033	**F1C1C183A001**	**0.018 16V**	**[M]**
C1034	**ECEA1HKA3R3B**	**3.3 50V**	**[M]**
C1035	**ECEA1HKA3R3B**	**3.3 50V**	**[M]**
C1036	**ECJ1VB1C333K**	**0.033 16V**	**[M]**
C1037	**ECEA1HKA3R3B**	**3.3 50V**	**[M]**
C1038	**ECJ1VB1H221K**	**220P 50V**	**[M]**
C1039	**ECJ1VB1H221K**	**220P 50V**	**[M]**
C1040	**ECEA1CKA100B**	**10 16V**	**[M]**
C1041	**ECEA1CKA100B**	**10 16V**	**[M]**
C1042	**ECEA1CKA220B**	**22 16V**	**[M]**
C1043	**ECEA1HKA4R7B**	**4.7 50V**	**[M]**
C1044	**ECEA1AKA330B**	**33 10V**	**[M]**
C1045	**ECEA1AKA220B**	**22 10V**	**[M]**
C1046	**ECEA1CKA221B**	**220 16V**	**[M]**
C1047	**ECEA1HKA010B**	**1 50V**	**[M]**
C1048	**ECEA1HKA010B**	**1 50V**	**[M]**
C1049	**ECJ1VB1H102K**	**1000P 50V**	**[M]**
C1050	**ECJ1VB1H102K**	**1000P 50V**	**[M]**
C1051	**ECEA1HKA010B**	**1 50V**	**[M]**
C1052	**ECEA1HKA010B**	**1 50V**	**[M]**
C1053	**ECA1CM221B**	**220 16V**	**[M]**
C1054	**ECEA1HKA3R3B**	**3.3 50V**	**[M]**
C1055	**ECEA1HKA0R1B**	**0.1 50V**	**[M]**
C1056	**ECEA1CKA100B**	**10 16V**	**[M]**
C1057	**ECJ1VB1H102K**	**1000P 50V**	**[M]**
C1058	**ECJ1VB1H102K**	**1000P 50V**	**[M]**
C1064	**ECEA1HKA3R3B**	**3.3 50V**	**[M]**
		CHIP JUMPER	
RJ705	**ERJ3GEY0R00V**	**0 1/16W**	**[M]**
RJ706	**ERJ3GEY0R00V**	**0 1/16W**	**[M]**
RJ707	**ERJ3GEY0R00V**	**0 1/16W**	**[M]**
RJ712	**ERJ3GEY0R00V**	**0 1/16W**	**[M]**
RJ722	**ERJ3GEY0R00V**	**0 1/16W**	**[M]**
RJ733	**ERJ3GEY0R00V**	**0 1/16W**	**[M]**

23.5. Packing Materials & Accessories Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		PACKING MATERIALS	
P1	**RPGX1210**	**PACKING CASE**	**[M]P-K**
P1	**RPGX1211**	**PACKING CASE**	**[M]PC-K**
P1	**RPGX1283**	**PACKING CASE**	**[M]P-S**
P2	**RPNX0226**	**POLYFOAM**	**[M]**
P3	**RPFX0007**	**MIRAMAT BAG**	**[M]**
		ACCESSORIES	
A1	**EUR7710020**	**REMOTE CONTROL**	**[M]P-S**
A1	**N2QAHB000045**	**REMOTE CONTROL**	**[M]PC-K/ P-K**
A1-1	**RKK-HTR0283**	**R/C BATTERY COVER**	**[M]PC-K/ P-K**
A1-1	**UR64EC2337F**	**R/C BATTERY COVER**	**[M]P-S**
A2	**RJA0065-A**	**AC CORD**	**[M]** ⚠
A3	**RQT7528-P**	**O/I BOOK (En)**	**[M]**
A3	**RQT7529-M**	**O/I BOOK (Sp)**	**[M]P-K/ P-S**
A3	**RQT7530-C**	**O/I BOOK (Cf)**	**[M]PC-K**
A4	**RSA0006-J**	**FM ANTENNA**	**[M]**
A5	**N1DADYY00002**	**AM LOOP ANTENNA**	**[M]**

23.6. Packaging


P2 (RPNX0226)
*P2 (A)
*P2 (B)
*P2 (A)
POLYFOAM A
*P2 (B)
POLYFOAM B
SB-AK220
(FRONT SPEAKER)
P3 (RPFX0007)
CARTON BOX
PRINTING FRONT
P1 (RPGX1210) - P-K
(RPGX1211) - PC-K
(RPGX1283) - P-S
MAIN UNIT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W130
W160
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Q106
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W255
W265
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R118
R144
C106
C126
W114
W113
C114
W111
CF202
R119
C101
W144
C136
C119
C131
C115
R121
R120
R102
C116
W103
W486
C120
W150
W270
W266
Q308
R326
R325
R324
R323
R327
C321
Q310
Q309
D307
D308
R329
W380
D309
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Q324
D324
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R348
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D312
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R396
R344
D306
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R811
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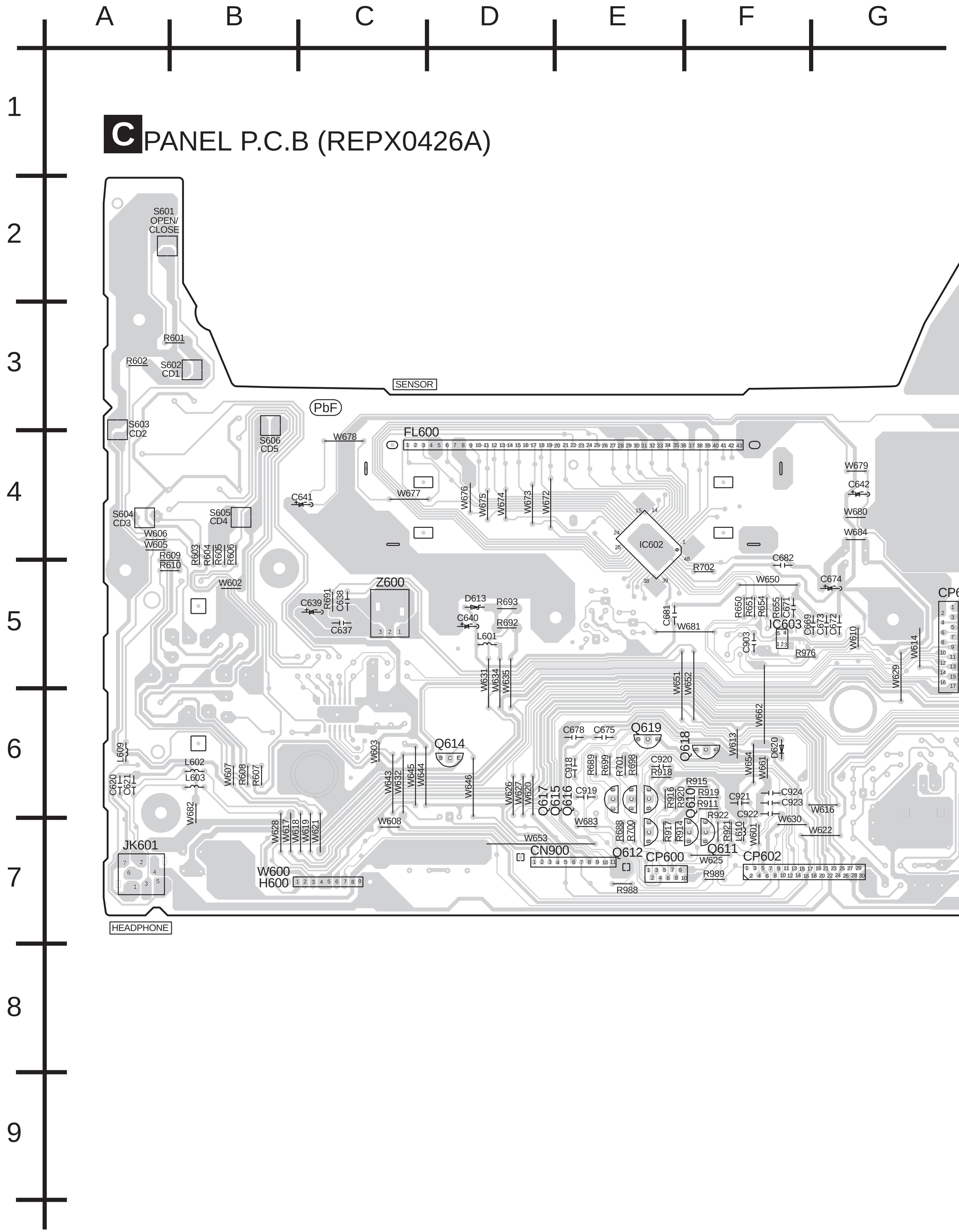
C PANEL P.C.B (REPX0426A)



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S601 OPEN/ CLOSE
R601
R602
S602 CD1
SENSOR
PbF
S603 CD2
S606 CD5
W678
FL600
S604 CD3
S605 CD4
W606
W605
R609
R610
R603
R604
R605
R606
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W675
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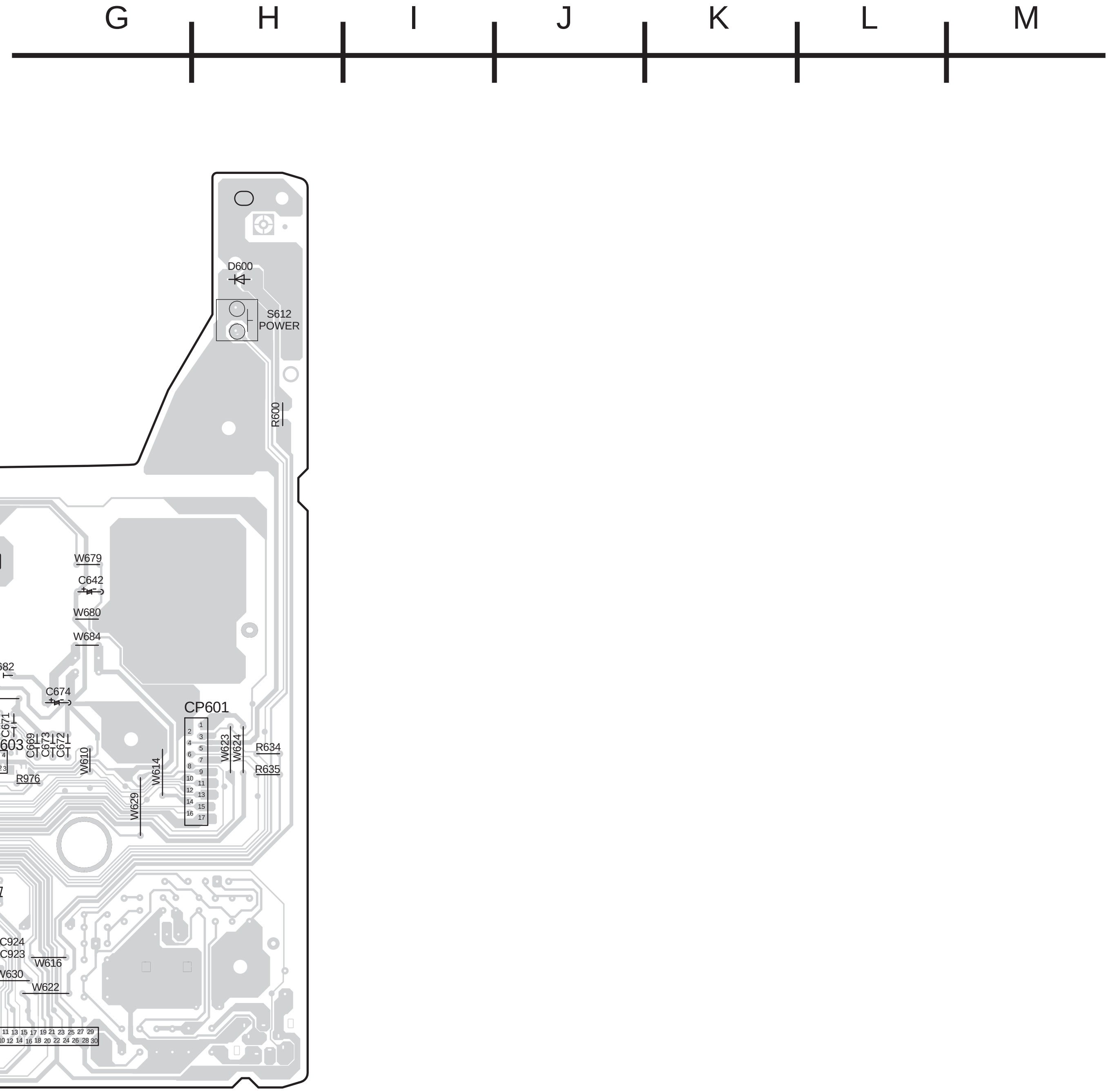
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C672
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W629
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W630
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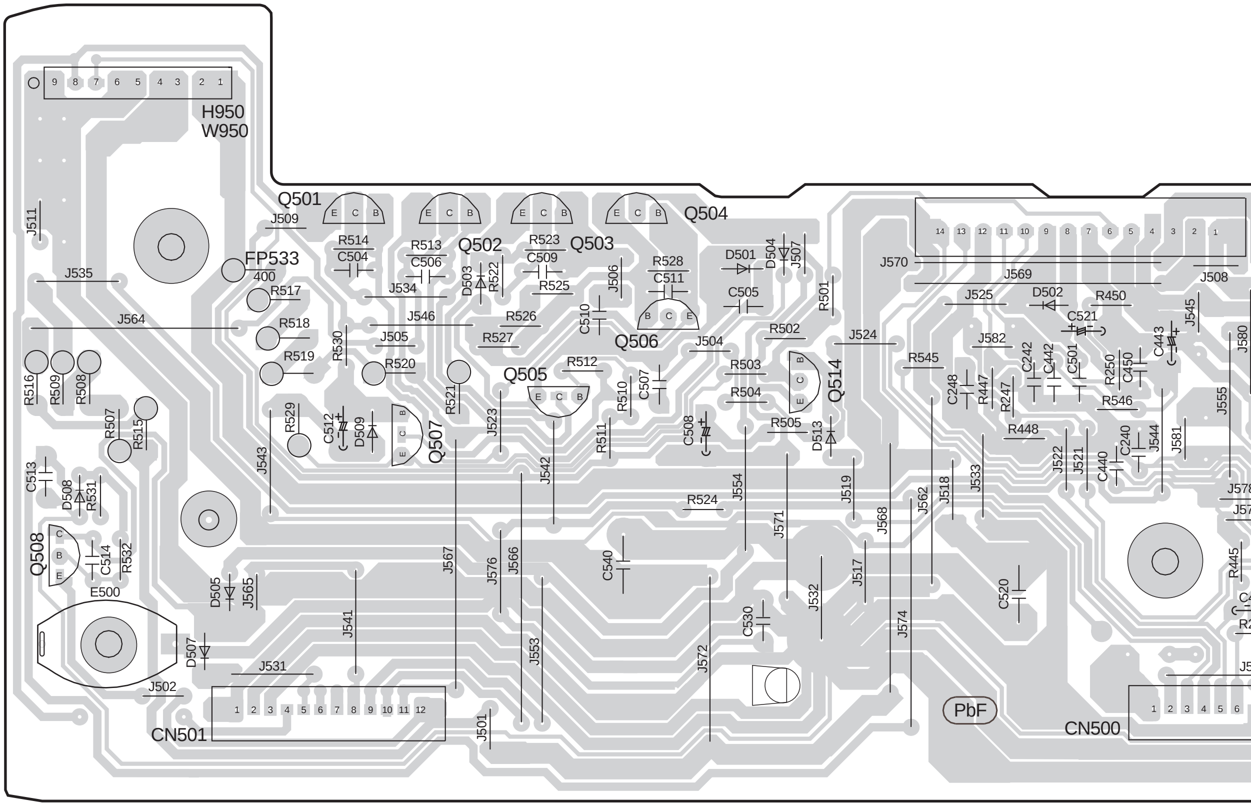
I POWER P.C.B (REPX0328K)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FP533
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R518
R519
R520
J534
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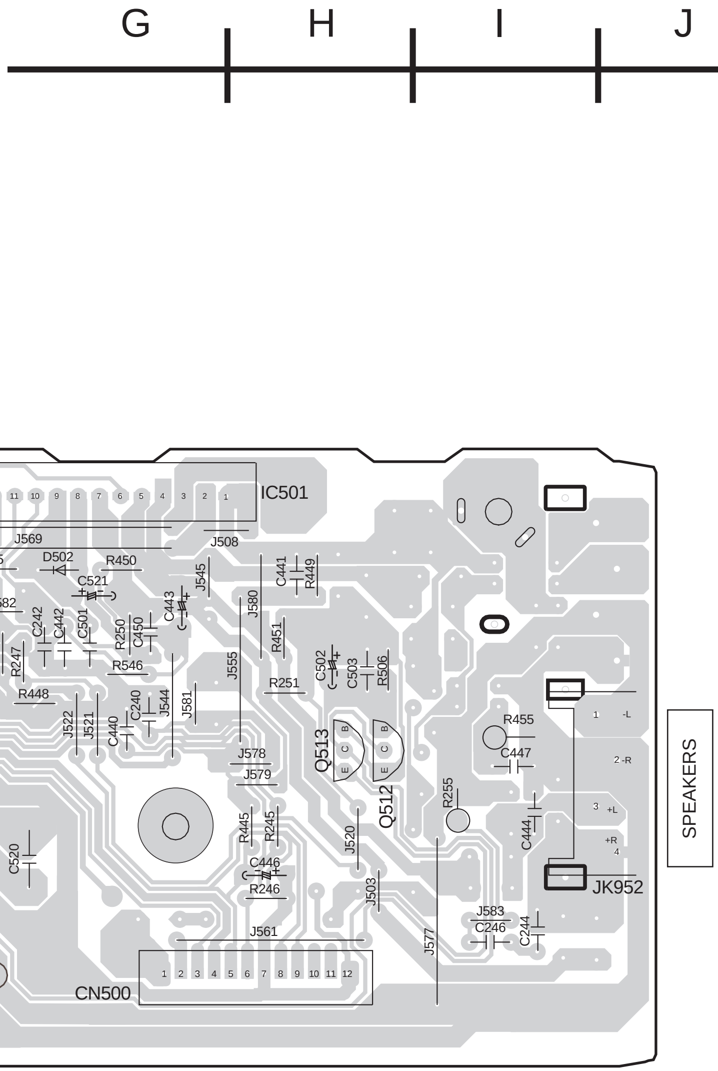
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C446
R246
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J577
J583
C246
C244
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3 +L
+R 4
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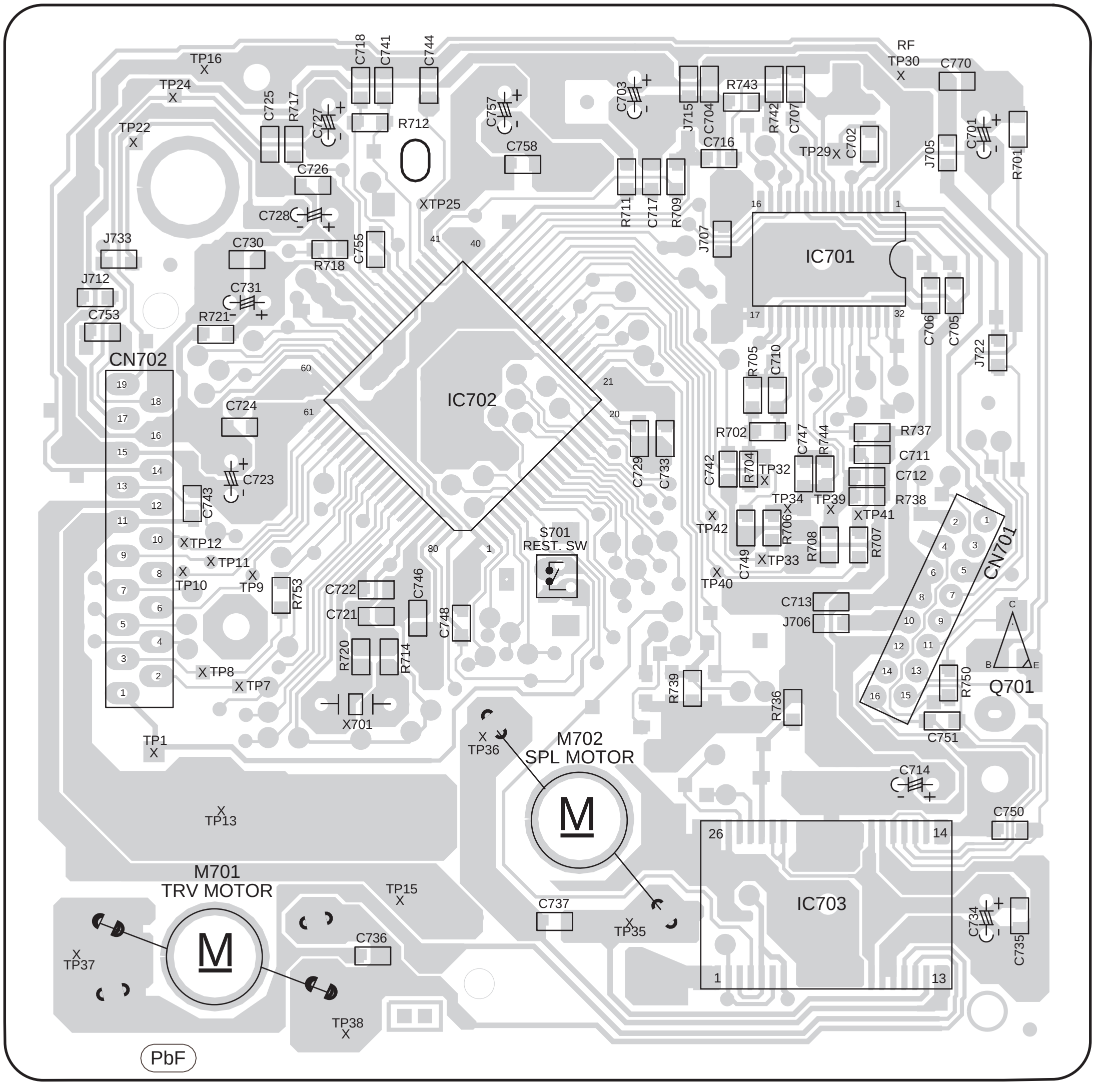
A CD SERVO P.C.B (REPX0405A)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C750
TP13
IC703
M701
TRV MOTOR
TP15
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TP38
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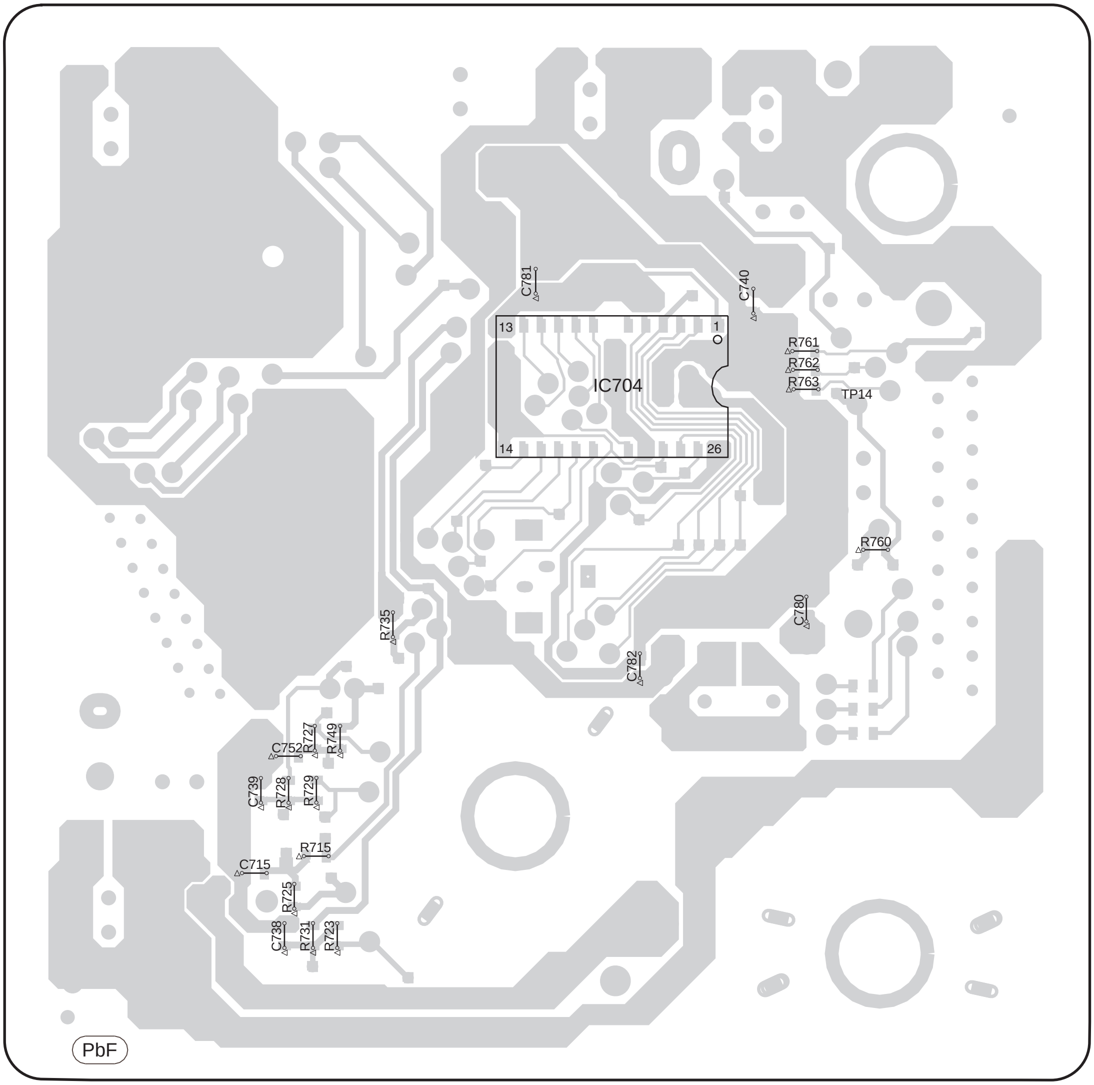
(SIDE A)

A CD SERVO P.C.B (REPX0405A)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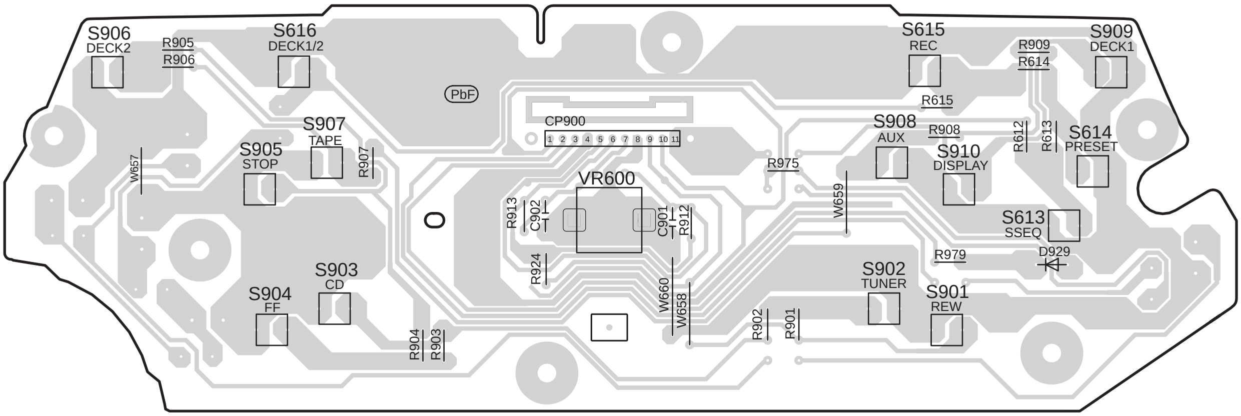
R761
R762
R763
TP14
R760
C780
R735
C782
C752
R727
R749
C739
R728
R729
R715
C715
R725
C738
R731
R723
PbF

(SIDE B)

D TACT P.C.B (REPX0426A)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S906
DECK2
R905
R906
S616
DECK1/2
PbF
S615
REC
R909
R614
S909
DECK1
R615
CP900
1 2 3 4 5 6 7 8 9 10 11
S908
AUX
R908
R612
R613
S614
PRESET
S910
DISPLAY
S907
TAPE
S905
STOP
W657
R907
R975
VR600
W659
R913
C902
C901
R912
S613
SSEQ
R979
D929
R924
S903
CD
S904
FF
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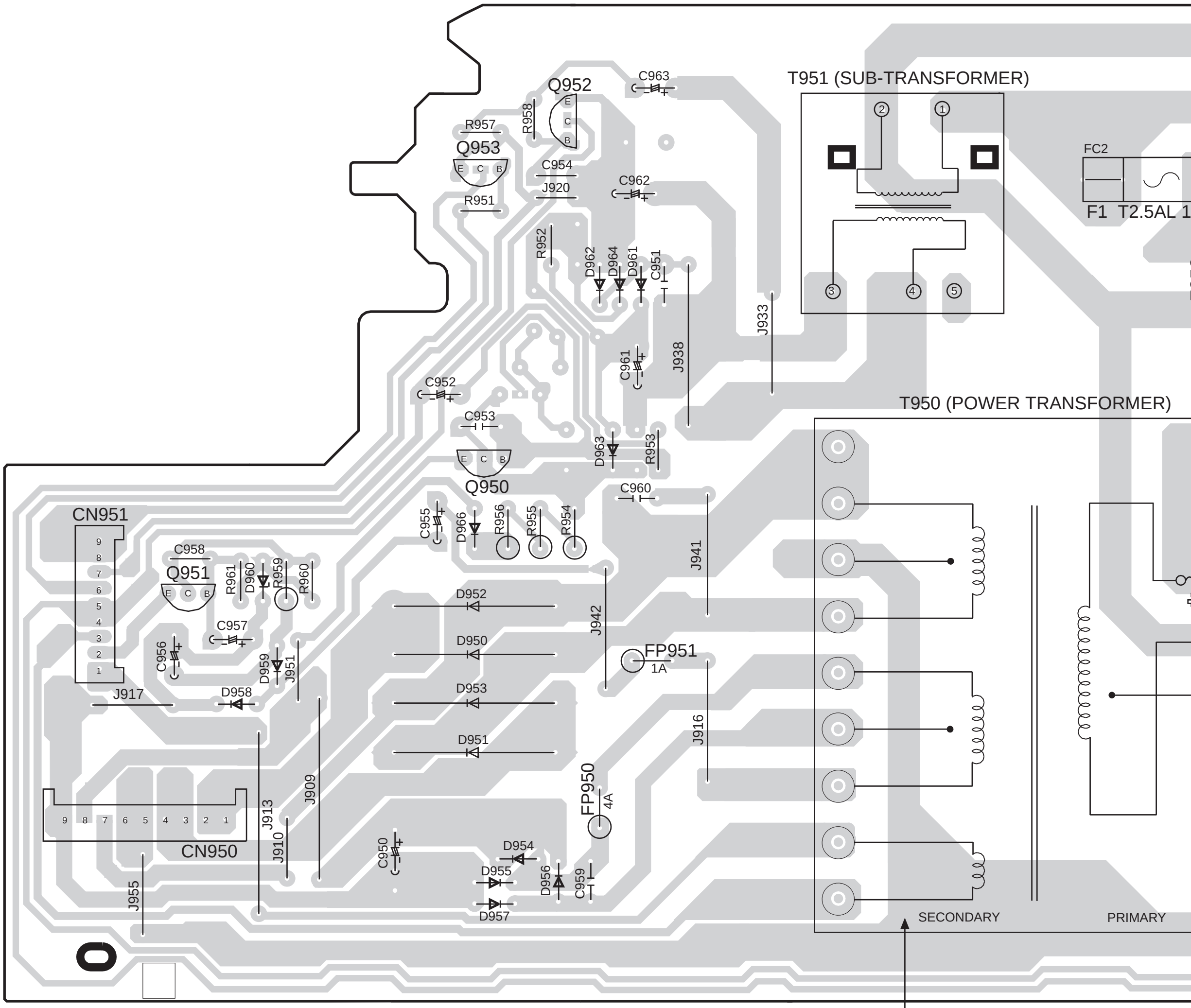
W658
R902
R901
R904
R903

E TRANSFORMER P.C.B (REPX0324K)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T951 (SUB-TRANSFORMER)
T950 (POWER TRANSFORMER)
FC2
F1 T2.5AL 1
Q952
Q953
Q950
Q951
C963
C962
C954
J920
R957
R958
R951
R952
D962
D964
D961
C951
J933
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R953
C960
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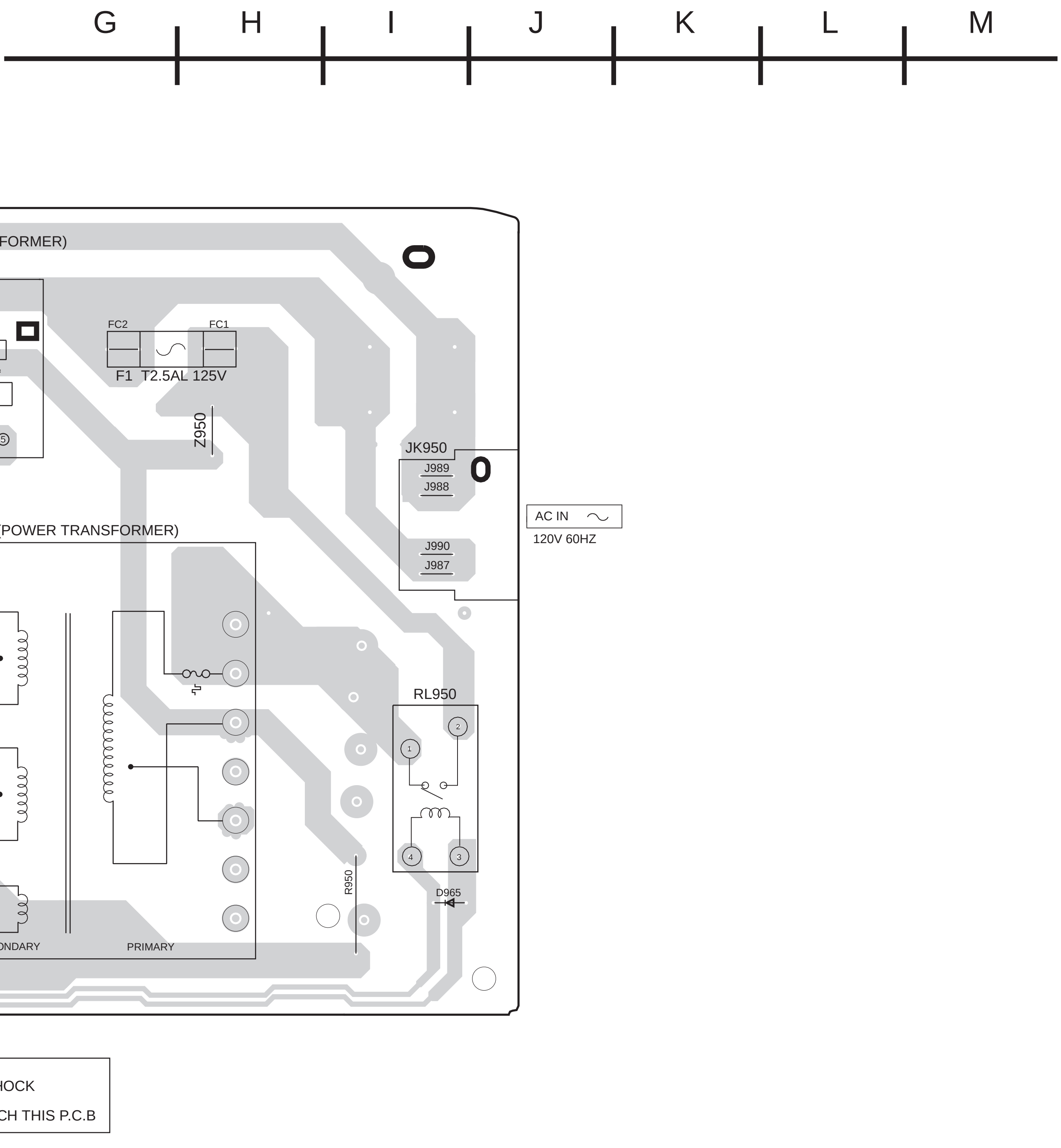
J916
FP950
4A
J909
J913
J910
CN950
C950
D954
D955
D956
C959
D957
J955
SECONDARY
PRIMARY

CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE.
PLEASE DO NOT TOUCH THIS P.C.B

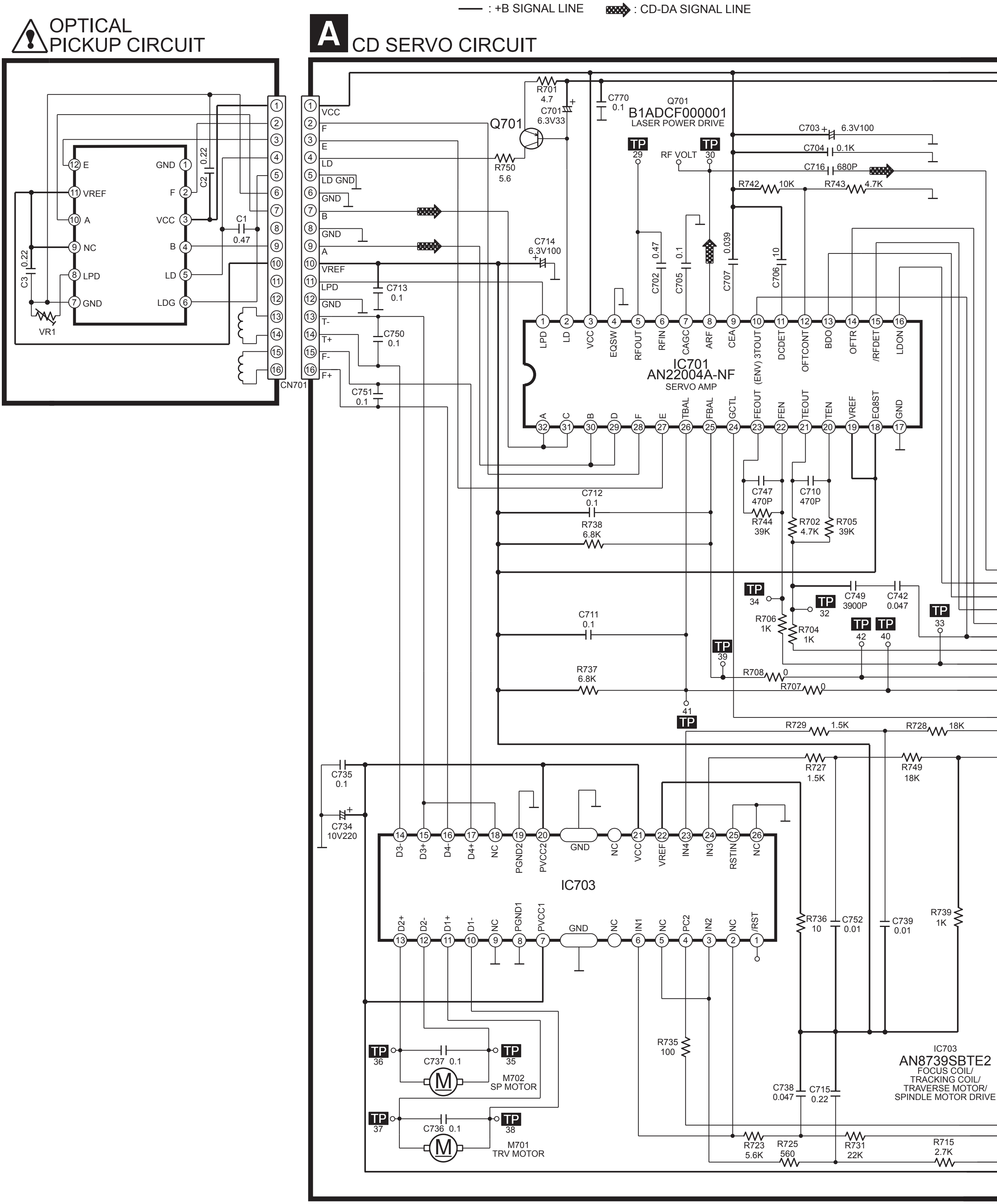

G
H
I
J
K
L
M
FORMER)
FC2
FC1
F1 T2.5AL 125V
Z950
5
JK950
J989
J988
J990
J987
AC IN
120V 60HZ
(POWER TRANSFORMER)
RL950
1
2
3
4
R950
D965
ONDARY
PRIMARY

HOCK

CH THIS P.C.B

SCHEMATIC DIAGRAM - 1

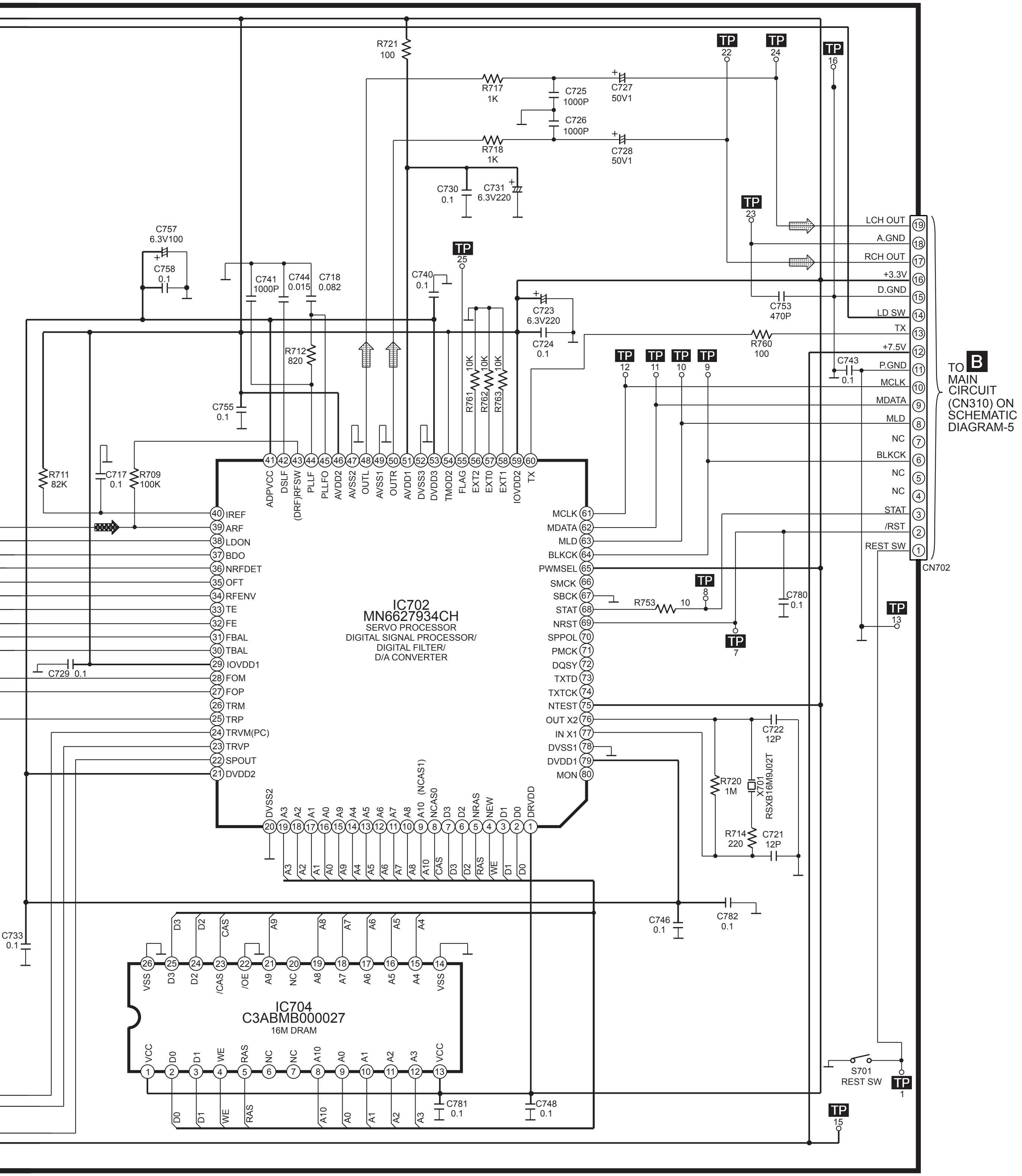
— : +B SIGNAL LINE ▨ : CD-DA SIGNAL LINE


OPTICAL PICKUP CIRCUIT
A
CD SERVO CIRCUIT
E
GND
VREF
F
A
VCC
NC
B
LPD
LD
GND
LDG
C2 0.22
C1 0.47
C3 0.22
VR1
CN701
VCC
F
E
LD
LD GND
GND
B
GND
A
VREF
LPD
GND
T-
T+
F-
F+
R701 4.7
C701 6.3V33
Q701
R750 5.6
C770 0.1
Q701
B1ADCF000001
LASER POWER DRIVE
TP 29
RF VOLT
TP 30
C703 6.3V100
C704 0.1K
C716 680P
R742 10K
R743 4.7K
C714 6.3V100
C713 0.1
C750 0.1
C751 0.1
C702 0.47
C705 0.1
C707 0.039
C706 10
LPD
LD
VCC
EQSW
RFOUT
RFIN
CAGC
ARF
CEA
(ENV) 3TOUT
DCDET
OFTCONT
BDO
OFTR
/RFDET
LDON
IC701
AN22004A-NF
SERVO AMP
A
C
B
D
F
E
TBAL
FBAL
GCTL
FEOUT
FEN
TEOUT
TEN
VREF
EQ8ST
GND
C712 0.1
R738 6.8K
C747 470P
R744 39K
C710 470P
R702 4.7K
R705 39K
TP 34
TP 32
C749 3900P
C742 0.047
TP 33
R706 1K
R704 1K
TP 42
TP 40
C711 0.1
TP 39
R708 0
R707 0
R737 6.8K
41 TP
R729 1.5K
R728 18K
R727 1.5K
R749 18K
C735 0.1
C734 10V220
D3-
D3+
D4-
D4+
NC
PGND2
PVCC2
GND
NC
VCC
VREF
IN4
IN3
RSTIN
NC
IC703
D2+
D2-
D1+
D1-
NC
PGND1
PVCC1
GND
NC
IN1
NC
PC2
IN2
NC
/RST
R736 10
C752 0.01
C739 0.01
R739 1K
R735 100
C738 0.047
C715 0.22
IC703
AN8739SBTE2
FOCUS COIL/
TRACKING COIL/
TRAVERSE MOTOR/
SPINDLE MOTOR DRIVE
TP 36
C737 0.1
TP 35
M
M702
SP MOTOR
TP 37
C736 0.1
TP 38
M
M701
TRV MOTOR
R723 5.6K
R725 560
R731 22K
R715 2.7K

SCHEMATIC DIAGRAM - 2

—— : +B SIGNAL LINE ▦➡ : CD-DA SIGNAL LINE ▤➡ : CD SIGNAL LINE

A CD SERVO CIRCUIT



R721
100
R717
1K
C725
1000P
C727
50V1
C726
1000P
R718
1K
C728
50V1
C730
0.1
C731
6.3V220
TP 22
TP 24
TP 16
TP 23
TP 25
C757
6.3V100
C758
0.1
C741
1000P
C744
0.015
C718
0.082
C740
0.1
C723
6.3V220
C724
0.1
R712
820
C755
0.1
R761 10K
R762 10K
R763 10K
R760
100
C753
470P
C743
0.1
TP 12
TP 11
TP 10
TP 9
LCH OUT 19
A.GND 18
RCH OUT 17
+3.3V 16
D.GND 15
LD SW 14
TX 13
+7.5V 12
P.GND 11
MCLK 10
MDATA 9
MLD 8
NC 7
BLKCK 6
NC 5
NC 4
STAT 3
/RST 2
REST SW 1
CN702
TO B MAIN CIRCUIT (CN310) ON SCHEMATIC DIAGRAM-5
R711
82K
C717
0.1
R709
100K
41 ADPVCC
42 DSLF
43 (DRF)RFSW
44 PLLF
45 PLLFO
46 AVDD2
47 AVSS2
48 OUTL
49 AVSS1
50 OUTR
51 AVDD1
52 DVSS3
53 DVDD3
54 TMOD2
55 FLAG
56 EXT2
57 EXT0
58 EXT1
59 IOVDD2
60 TX
40 IREF
39 ARF
38 LDON
37 BDO
36 NRFDET
35 OFT
34 RFENV
33 TE
32 FE
31 FBAL
30 TBAL
29 IOVDD1
28 FOM
27 FOP
26 TRM
25 TRP
24 TRVM(PC)
23 TRVP
22 SPOUT
21 DVDD2
C729 0.1
IC702
MN6627934CH
SERVO PROCESSOR
DIGITAL SIGNAL PROCESSOR/
DIGITAL FILTER/
D/A CONVERTER
MCLK 61
MDATA 62
MLD 63
BLKCK 64
PWMSEL 65
SMCK 66
SBCK 67
STAT 68
NRST 69
SPPOL 70
PMCK 71
DQSY 72
TXTD 73
TXTCK 74
NTEST 75
OUT X2 76
IN X1 77
DVSS1 78
DVDD1 79
MON 80
TP 8
R753
10
TP 7
C780
0.1
TP 13
C722
12P
R720
1M
X701
RSXB16M9J02T
R714
220
C721
12P
20 DVSS2
19 A3
18 A2
17 A1
16 A0
15 A9
14 A4
13 A5
12 A6
11 A7
10 A8
9 A10 (NCAS1)
8 NCAS0
7 D3
6 D2
5 NRAS
4 NEW
3 D1
2 D0
1 DRVDD
A3 A2 A1 A0 A9 A4 A5 A6 A7 A10 CAS D3 D2 RAS WE D1 D0
C733
0.1
C746
0.1
C782
0.1
D3 D2 CAS A9 A8 A7 A6 A5 A4
26 VSS
25 D3
24 D2
23 /CAS
22 /OE
21 A9
20 NC
19 A8
18 A7
17 A6
16 A5
15 A4
14 VSS
IC704
C3ABMB000027
16M DRAM
1 VCC
2 D0
3 D1
4 WE
5 RAS
6 NC
7 NC
8 A10
9 A0
10 A1
11 A2
12 A3
13 VCC
D0 D1 WE RAS A10 A0 A1 A2 A3
C781
0.1
C748
0.1
S701
REST SW
TP 1
TP 15

SCHEMATIC DIAGRAM - 3

: +B SIGNAL LINE

: FM/AM SIGNAL LINE

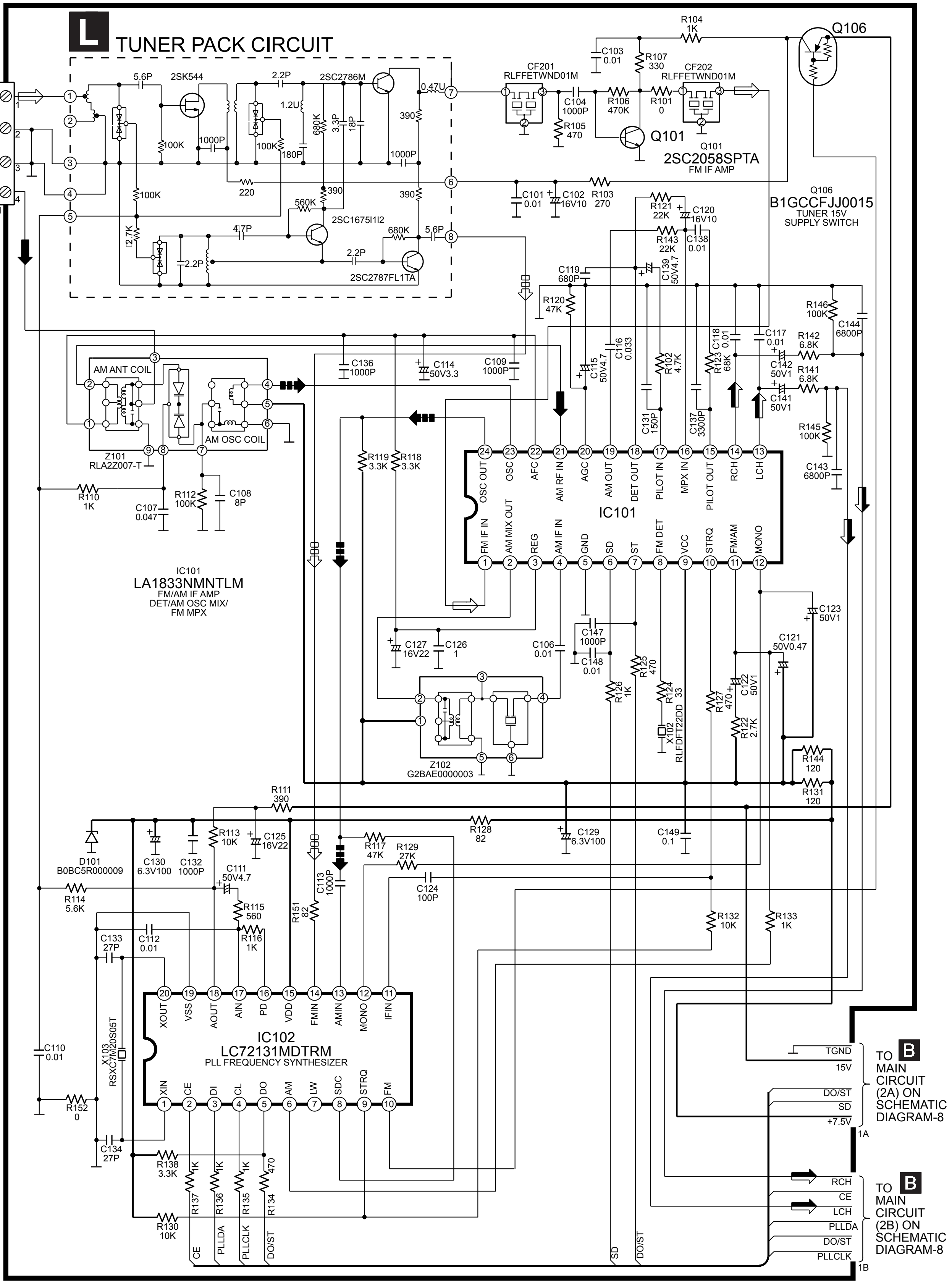
: FM SIGNAL LINE

: FM OSC SIGNAL LINE

: AM SIGNAL LINE

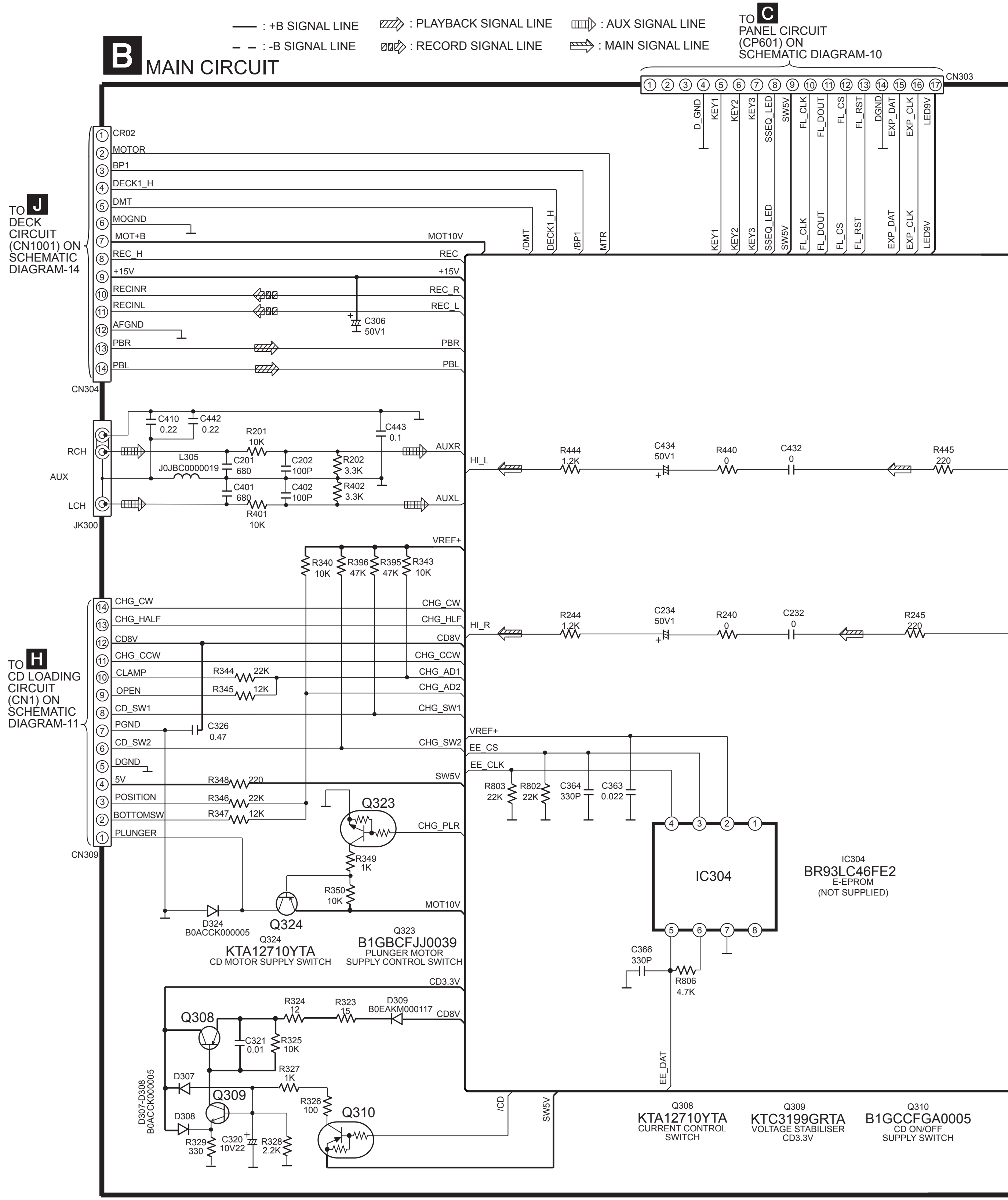
: AM OSC SIGNAL LINE

B TUNER/MAIN CIRCUIT



L TUNER PACK CIRCUIT
FM EXT ANT
75 OHM
GND
AM LOOP ANT
AM EXT ANT
JK101
1
2
3
4
5.6P
2SK544
2.2P
2SC2786M
0.47U
1.2U
1000P
100K
100K
180P
680K
3.3P
18P
390
1000P
220
390
560K
390
100K
2.7K
4.7P
2SC1675I1I2
680K
5.6P
2.2P
2.2P
2SC2787FL1TA
R104 1K
Q106
C103 0.01
R107 330
CF201 RLFFETWND01M
CF202 RLFFETWND01M
C104 1000P
R106 470K
R101 0
R105 470
Q101
Q101 2SC2058SPTA FM IF AMP
C101 0.01
C102 16V10
R103 270
Q106 B1GCCFJJ0015 TUNER 15V SUPPLY SWITCH
R121 22K
C120 16V10
R143 22K
C138 0.01
C119 680P
C139 50V4.7
R120 47K
R146 100K
C144 6800P
C136 1000P
C114 50V3.3
C109 1000P
C116 0.033
C115 50V4.7
R102 4.7K
R123 68K
C118 0.01
C117 0.01
R142 6.8K
C142 50V1
R141 6.8K
C141 50V1
R145 100K
C143 6800P
C131 150P
C137 3300P
AM ANT COIL
AM OSC COIL
Z101 RLA2Z007-T
R110 1K
C107 0.047
R112 100K
C108 8P
R119 3.3K
R118 3.3K
OSC OUT
OSC
AFC
AM RF IN
AGC
AM OUT
DET OUT
PILOT IN
MPX IN
PILOT OUT
RCH
LCH
IC101
FM IF IN
AM MIX OUT
REG
AM IF IN
GND
SD
ST
FM DET
VCC
STRQ
FM/AM
MONO
IC101 LA1833NMNTLM FM/AM IF AMP DET/AM OSC MIX/ FM MPX
C123 50V1
C127 16V22
C126 1
C106 0.01
C147 1000P
C148 0.01
R125 470
C121 50V0.47
R126 1K
R124 33
R127 470
C122 50V1
R122 2.7K
X102 RLFDFT22DD
Z102 G2BAE0000003
R144 120
R131 120
R111 390
R128 82
D101 B0BC5R000009
C130 6.3V100
C132 1000P
R113 10K
C125 16V22
R117 47K
R129 27K
C129 6.3V100
C149 0.1
C111 50V4.7
R114 5.6K
R115 560
C113 1000P
C124 100P
C133 27P
C112 0.01
R116 1K
R151 82
R132 10K
R133 1K
XOUT
VSS
AOUT
AIN
PD
VDD
FMIN
AMIN
MONO
IFIN
C110 0.01
X103 RSXC7M20S05T
IC102 LC72131MDTRM PLL FREQUENCY SYNTHESIZER
XIN
CE
DI
CL
DO
AM
LW
SDC
STRQ
FM
R152 0
C134 27P
R138 3.3K
R137 1K
R136 1K
R135 1K
R134 470
R130 10K
CE
PLLDA
PLLCLK
DO/ST
SD
DO/ST
TGND
15V
DO/ST
SD
+7.5V
1A
TO B MAIN CIRCUIT (2A) ON SCHEMATIC DIAGRAM-8
RCH
CE
LCH
PLLDA
DO/ST
PLLCLK
1B
TO B MAIN CIRCUIT (2B) ON SCHEMATIC DIAGRAM-8

SCHEMATIC DIAGRAM - 4



: +B SIGNAL LINE
: -B SIGNAL LINE
: PLAYBACK SIGNAL LINE
: RECORD SIGNAL LINE
: AUX SIGNAL LINE
: MAIN SIGNAL LINE
TO C PANEL CIRCUIT (CP601) ON SCHEMATIC DIAGRAM-10
B MAIN CIRCUIT
CN303
D_GND
KEY1
KEY2
KEY3
SSEQ_LED
SW5V
FL_CLK
FL_DOUT
FL_CS
FL_RST
DGND
EXP_DAT
EXP_CLK
LED9V
TO J DECK CIRCUIT (CN1001) ON SCHEMATIC DIAGRAM-14
CN304
CR02
MOTOR
BP1
DECK1_H
DMT
MOGND
MOT+B
REC_H
+15V
RECINR
RECINL
AFGND
PBR
PBL
MOT10V
REC
REC_R
REC_L
/DMT
DECK1_H
/BP1
MTR
C306 50V1
JK300
RCH
AUX
LCH
C410 0.22
C442 0.22
C443 0.1
R201 10K
L305 J0JBC0000019
C201 680
C202 100P
R202 3.3K
C401 680
C402 100P
R402 3.3K
R401 10K
AUXR
AUXL
HI_L
R444 1.2K
C434 50V1
R440 0
C432 0
R445 220
VREF+
R340 10K
R396 47K
R395 47K
R343 10K
HI_R
R244 1.2K
C234 50V1
R240 0
C232 0
R245 220
TO H CD LOADING CIRCUIT (CN1) ON SCHEMATIC DIAGRAM-11
CN309
CHG_CW
CHG_HALF
CD8V
CHG_CCW
CLAMP
OPEN
CD_SW1
PGND
CD_SW2
DGND
5V
POSITION
BOTTOMSW
PLUNGER
CHG_HLF
CHG_AD1
CHG_AD2
CHG_SW1
CHG_SW2
SW5V
CHG_PLR
R344 22K
R345 12K
C326 0.47
R348 220
R346 22K
R347 12K
Q323
R349 1K
R350 10K
Q324
D324 B0ACCK000005
Q324 KTA12710YTA CD MOTOR SUPPLY SWITCH
Q323 B1GBCFJJ0039 PLUNGER MOTOR SUPPLY CONTROL SWITCH
EE_CS
EE_CLK
R803 22K
R802 22K
C364 330P
C363 0.022
IC304
IC304 BR93LC46FE2 E-EPROM (NOT SUPPLIED)
C366 330P
R806 4.7K
EE_DAT
CD3.3V
Q308
R324 12
R323 15
D309 B0EAKM000117
C321 0.01
R325 10K
R327 1K
D307
D308
D307-D308 B0ACCK000005
Q309
R326 100
Q310
R329 330
C320 10V22
R328 2.2K
/CD
SW5V
Q308 KTA12710YTA CURRENT CONTROL SWITCH
Q309 KTC3199GRTA VOLTAGE STABILISER CD3.3V
Q310 B1GCCFGA0005 CD ON/OFF SUPPLY SWITCH

SCHEMATIC DIAGRAM - 5

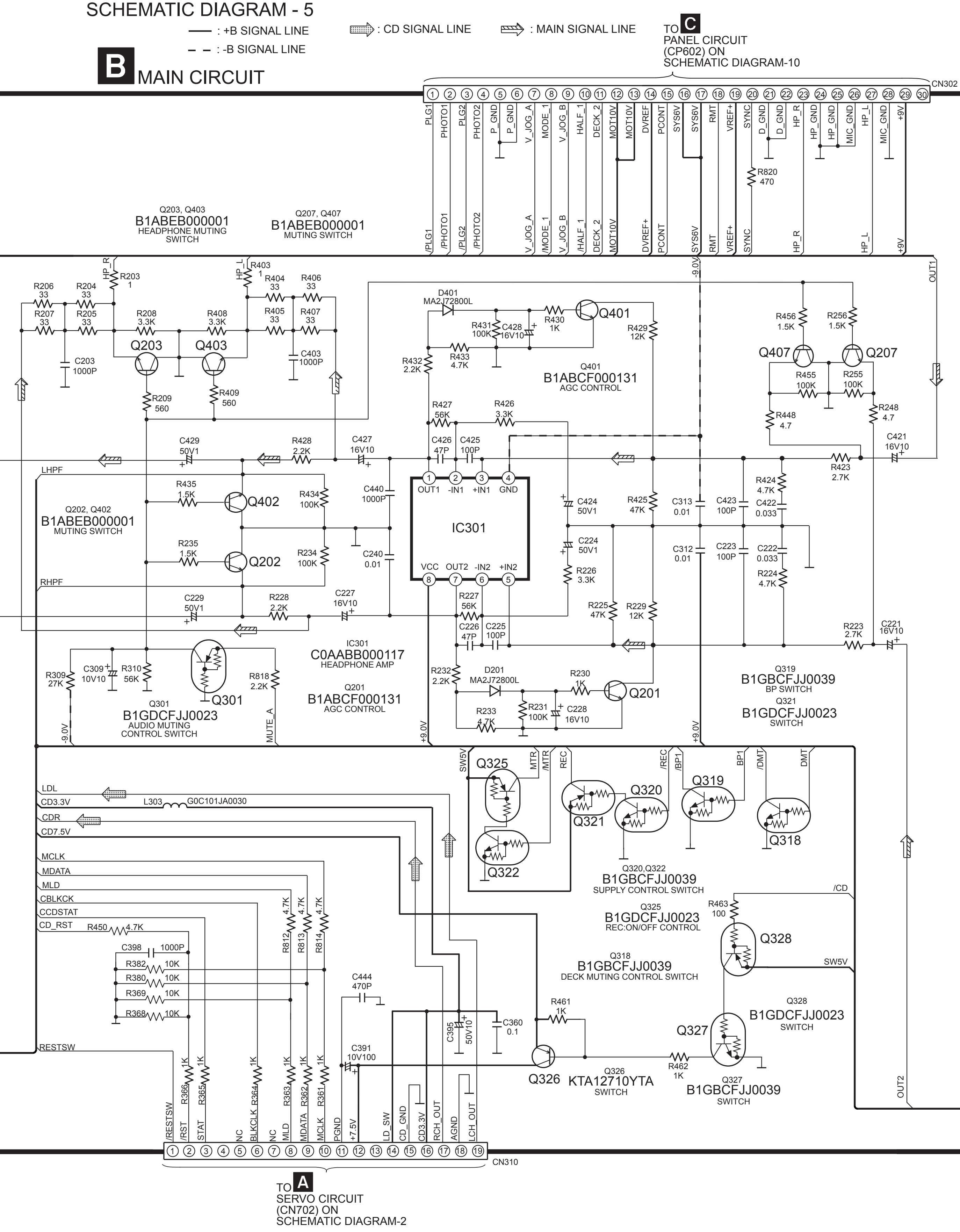
—— : +B SIGNAL LINE

– – : -B SIGNAL LINE

⇨ : CD SIGNAL LINE

⇨ : MAIN SIGNAL LINE

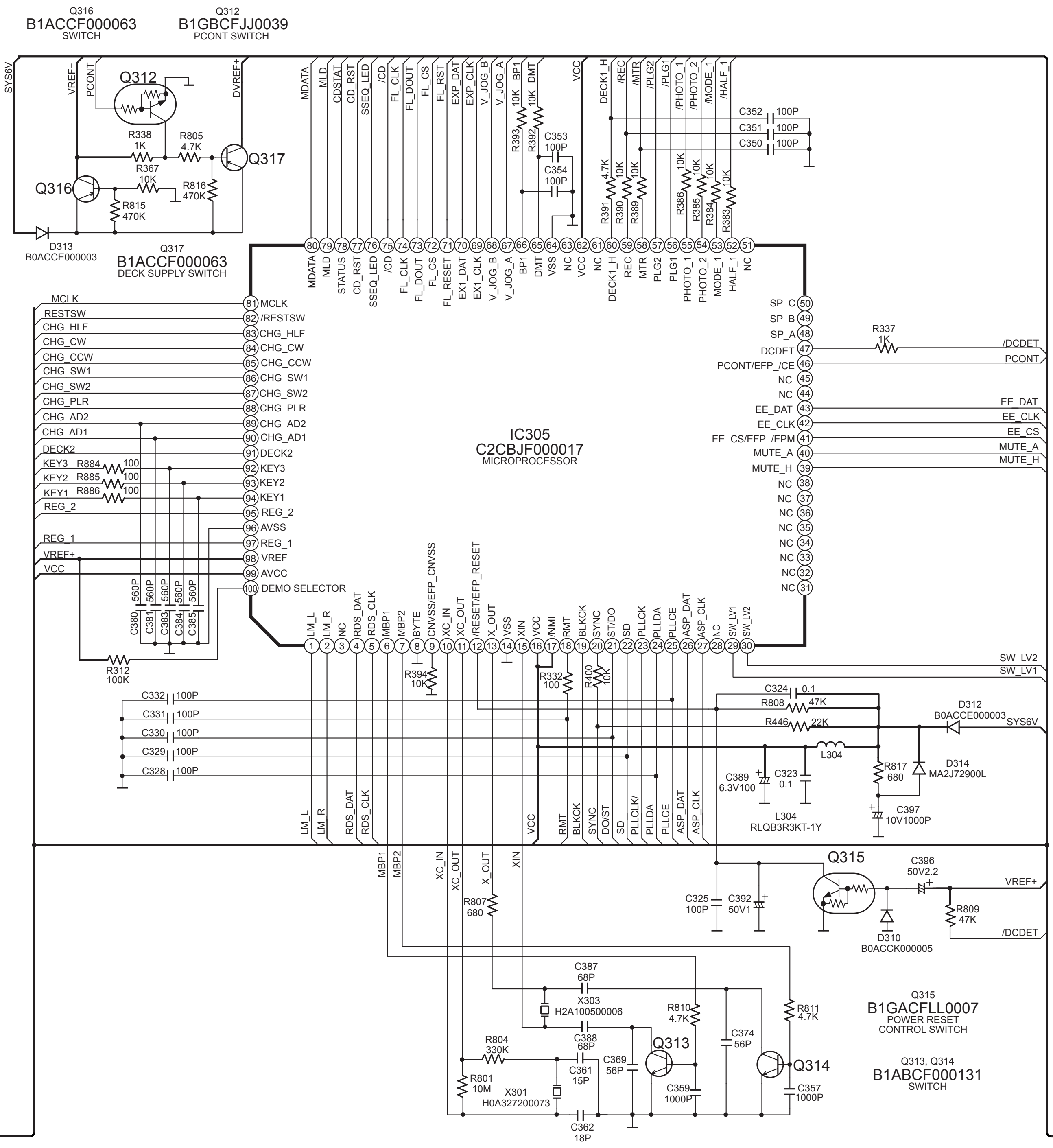
B MAIN CIRCUIT


TO C
PANEL CIRCUIT
(CP602) ON
SCHEMATIC DIAGRAM-10
CN302
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒ ㉓ ㉔ ㉕ ㉖ ㉗ ㉘ ㉙ ㉚
PLG1
PHOTO1
PLG2
PHOTO2
P_GND
P_GND
V_JOG_A
MODE_1
V_JOG_B
HALF_1
DECK_2
MOT10V
MOT10V
DVREF
PCONT
SYS6V
SYS6V
RMT
VREF+
SYNC
D_GND
D_GND
HP_R
HP_GND
HP_GND
MIC_GND
HP_L
MIC_GND
+9V
R820
470
/PLG1
/PHOTO1
/PLG2
/PHOTO2
V_JOG_A
/MODE_1
V_JOG_B
/HALF_1
DECK_2
MOT10V
DVREF+
PCONT
SYS6V
RMT
VREF+
SYNC
HP_R
HP_L
+9V
-9.0V
OUT1
Q203, Q403
B1ABEB000001
HEADPHONE MUTING
SWITCH
Q207, Q407
B1ABEB000001
MUTING SWITCH
HP_R
R203
1
HP_L
R403
1
R206
33
R204
33
R207
33
R205
33
R208
3.3K
R408
3.3K
R404
33
R406
33
R405
33
R407
33
Q203
Q403
C203
1000P
C403
1000P
R209
560
R409
560
D401
MA2J72800L
R431
100K
C428
16V10
R430
1K
Q401
R429
12K
R432
2.2K
R433
4.7K
Q401
B1ABCF000131
AGC CONTROL
R456
1.5K
R256
1.5K
Q407
Q207
R455
100K
R255
100K
R448
4.7
R248
4.7
R427
56K
R426
3.3K
C426
47P
C425
100P
C429
50V1
R428
2.2K
C427
16V10
C421
16V10
R423
2.7K
LHPF
R435
1.5K
Q402
R434
100K
C440
1000P
① OUT1
② -IN1
③ +IN1
④ GND
IC301
C424
50V1
R425
47K
C313
0.01
C423
100P
R424
4.7K
C422
0.033
Q202, Q402
B1ABEB000001
MUTING SWITCH
R235
1.5K
Q202
R234
100K
C240
0.01
⑧ VCC
⑦ OUT2
⑥ -IN2
⑤ +IN2
C224
50V1
R226
3.3K
C312
0.01
C223
100P
C222
0.033
R224
4.7K
RHPF
C229
50V1
R228
2.2K
C227
16V10
R227
56K
R225
47K
R229
12K
C226
47P
C225
100P
R223
2.7K
C221
16V10
IC301
C0AABB000117
HEADPHONE AMP
R309
27K
C309
10V10
R310
56K
Q301
R818
2.2K
Q301
B1GDCFJJ0023
AUDIO MUTING
CONTROL SWITCH
Q201
B1ABCF000131
AGC CONTROL
R232
2.2K
D201
MA2J72800L
R230
1K
Q201
R233
4.7K
R231
100K
C228
16V10
Q319
B1GBCFJJ0039
BP SWITCH
Q321
B1GDCFJJ0023
SWITCH
-9.0V
MUTE_A
+9.0V
+9.0V
SW5V
Q325
MTR
/MTR
REC
/REC
/BP1
BP1
/DMT
DMT
Q320
Q319
Q321
Q318
Q322
LDL
CD3.3V
L303
G0C101JA0030
CDR
CD7.5V
MCLK
MDATA
MLD
CBLKCK
CCDSTAT
CD_RST
R450
4.7K
Q320,Q322
B1GBCFJJ0039
SUPPLY CONTROL SWITCH
Q325
B1GDCFJJ0023
REC:ON/OFF CONTROL
/CD
R463
100
Q328
R812
4.7K
R813
4.7K
R814
4.7K
C398
1000P
R382
10K
R380
10K
R369
10K
R368
10K
Q318
B1GBCFJJ0039
DECK MUTING CONTROL SWITCH
SW5V
C444
470P
Q328
B1GDCFJJ0023
SWITCH
R461
1K
C395
50V10
C360
0.1
Q327
RESTSW
C391
10V100
R462
1K
Q326
KTA12710YTA
SWITCH
Q326
Q327
B1GBCFJJ0039
SWITCH
OUT2
R366
1K
R365
1K
R364
1K
R363
1K
R362
1K
R361
1K
/RESTSW
/RST
STAT
NC
BLKCLK
NC
MLD
MDATA
MCLK
PGND
+7.5V
LD_SW
CD_GND
CD3.3V
RCH_OUT
AGND
LCH_OUT
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲
CN310
TO A
SERVO CIRCUIT
(CN702) ON
SCHEMATIC DIAGRAM-2

SCHEMATIC DIAGRAM - 6

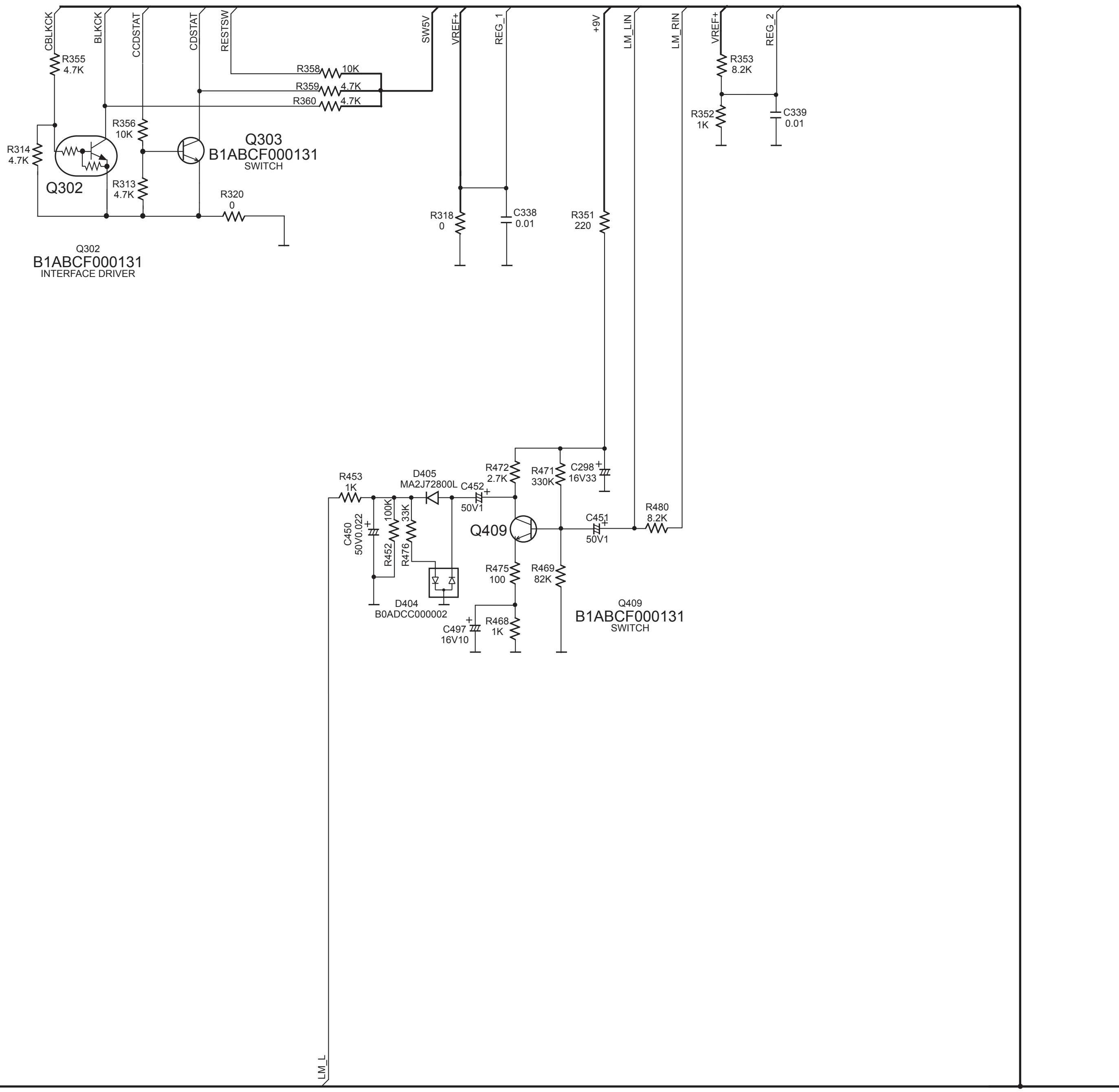
—— : +B SIGNAL LINE

B MAIN CIRCUIT


Q316
B1ACCF000063
SWITCH
Q312
B1GBCFJJ0039
PCONT SWITCH
SYS6V
VREF+
PCONT
DVREF+
Q312
R338
1K
R805
4.7K
Q317
R367
10K
Q316
R816
470K
R815
470K
D313
B0ACCE000003
Q317
B1ACCF000063
DECK SUPPLY SWITCH
IC305
C2CBJF000017
MICROPROCESSOR
MDATA
MLD
CDSTAT
CD_RST
SSEQ_LED
/CD
FL_CLK
FL_DOUT
FL_CS
FL_RST
EXP_DAT
EXP_CLK
V_JOG_B
V_JOG_A
10K BP1
10K DMT
VCC
DECK1_H
/REC
/MTR
/PLG2
/PLG1
/PHOTO_1
/PHOTO_2
/MODE_1
/HALF_1
R393
R392
C353
100P
C354
100P
C352
100P
C351
100P
C350
100P
R391
4.7K
R390
10K
R389
10K
R386
10K
R385
10K
R384
10K
R383
10K
80 MDATA
79 MLD
78 STATUS
77 CD_RST
76 SSEQ_LED
75 /CD
74 FL_CLK
73 FL_DOUT
72 FL_CS
71 FL_RESET
70 EX1_DAT
69 EX1_CLK
68 V_JOG_B
67 V_JOG_A
66 BP1
65 DMT
64 VSS
63 NC
62 VCC
61 NC
60 DECK1_H
59 REC
58 MTR
57 PLG2
56 PLG1
55 PHOTO_1
54 PHOTO_2
53 MODE_1
52 HALF_1
51 NC
MCLK
RESTSW
CHG_HLF
CHG_CW
CHG_CCW
CHG_SW1
CHG_SW2
CHG_PLR
CHG_AD2
CHG_AD1
DECK2
KEY3
KEY2
KEY1
REG_2
REG_1
VREF+
VCC
R884
100
R885
100
R886
100
81 MCLK
82 /RESTSW
83 CHG_HLF
84 CHG_CW
85 CHG_CCW
86 CHG_SW1
87 CHG_SW2
88 CHG_PLR
89 CHG_AD2
90 CHG_AD1
91 DECK2
92 KEY3
93 KEY2
94 KEY1
95 REG_2
96 AVSS
97 REG_1
98 VREF
99 AVCC
100 DEMO SELECTOR
C380 560P
C381 560P
C383 560P
C384 560P
C385 560P
R312
100K
50 SP_C
49 SP_B
48 SP_A
47 DCDET
46 PCONT/EFP_/CE
45 NC
44 NC
43 EE_DAT
42 EE_CLK
41 EE_CS/EFP_/EPM
40 MUTE_A
39 MUTE_H
38 NC
37 NC
36 NC
35 NC
34 NC
33 NC
32 NC
31 NC
R337
1K
/DCDET
PCONT
EE_DAT
EE_CLK
EE_CS
MUTE_A
MUTE_H
1 LM_L
2 LM_R
3 NC
4 RDS_DAT
5 RDS_CLK
6 MBP1
7 MBP2
8 BYTE
9 CNVSS/EFP_CNVSS
10 XC_IN
11 XC_OUT
12 /RESET/EFP_RESET
13 X_OUT
14 VSS
15 XIN
16 VCC
17 /NMI
18 RMT
19 BLKCK
20 SYNC
21 ST/DO
22 SD
23 PLLCK
24 PLLDA
25 PLLCE
26 ASP_DAT
27 ASP_CLK
28 NC
29 SW_LV1
30 SW_LV2
R394
10K
R332
100
R400
10K
SW_LV2
SW_LV1
C324
0.1
R808
47K
R446
22K
D312
B0ACCE000003
SYS6V
L304
C389
6.3V100
C323
0.1
R817
680
D314
MA2J72900L
L304
RLQB3R3KT-1Y
C397
10V1000P
C332 100P
C331 100P
C330 100P
C329 100P
C328 100P
LM_L
LM_R
RDS_DAT
RDS_CLK
VCC
RMT
BLKCK
SYNC
DO/ST
SD
PLLCLK/
PLLDA
PLLCE
ASP_DAT
ASP_CLK
MBP1
MBP2
XC_IN
XC_OUT
X_OUT
XIN
Q315
C396
50V2.2
VREF+
C325
100P
C392
50V1
R809
47K
/DCDET
D310
B0ACCK000005
R807
680
C387
68P
X303
H2A100500006
R810
4.7K
C374
56P
R811
4.7K
Q315
B1GACFLL0007
POWER RESET
CONTROL SWITCH
R804
330K
C388
68P
C369
56P
Q313
Q314
C361
15P
R801
10M
X301
H0A327200073
C359
1000P
C357
1000P
C362
18P
Q313, Q314
B1ABCF000131
SWITCH

: +B SIGNAL LINE

B MAIN CIRCUIT


CBLKCK
BLKCK
CCDSTAT
CDSTAT
RESTSW
SW5V
VREF+
REG_1
+9V
LM_LIN
LM_RIN
VREF+
REG_2
R355 4.7K
R358 10K
R359 4.7K
R360 4.7K
R356 10K
R314 4.7K
Q302
Q303
B1ABCF000131
SWITCH
R313 4.7K
R320 0
Q302
B1ABCF000131
INTERFACE DRIVER
R318 0
C338 0.01
R351 220
R353 8.2K
R352 1K
C339 0.01
R453 1K
D405 MA2J72800L
C452 50V1
R472 2.7K
R471 330K
C298 16V33
C450 50V0.022
R452 100K
R476 33K
Q409
C451 50V1
R480 8.2K
R475 100
R469 82K
D404 B0ADCC000002
C497 16V10
R468 1K
Q409
B1ABCF000131
SWITCH
LM_L

SCHEMATIC DIAGRAM - 8

— : +B SIGNAL LINE

– – : -B SIGNAL LINE

⇨ : AUX SIGNAL LINE

⇨ : CD SIGNAL LINE

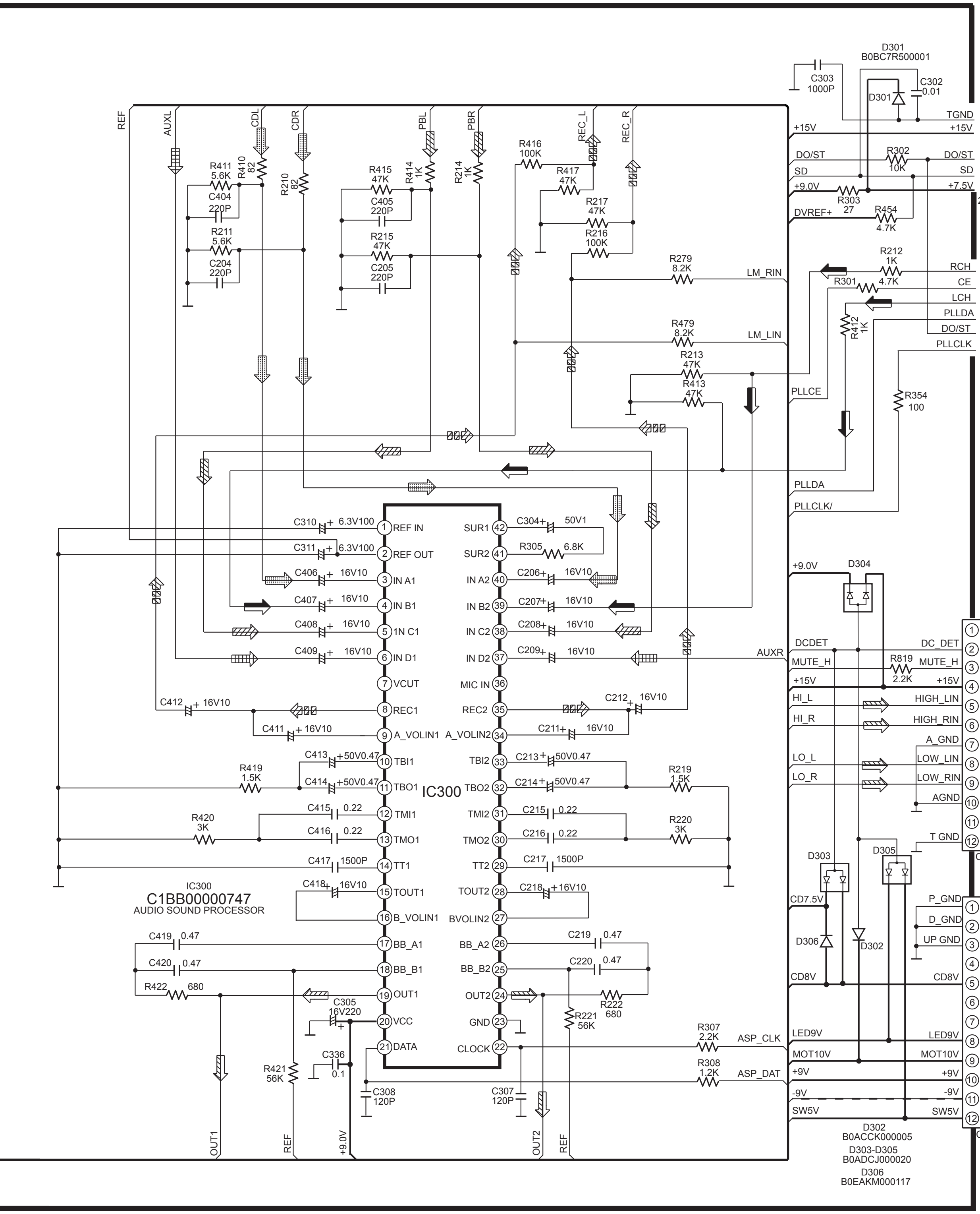
➡ : FM/AM SIGNAL LINE

⇨ : MAIN SIGNAL LINE

⇨ : PLAYBACK SIGNAL LINE

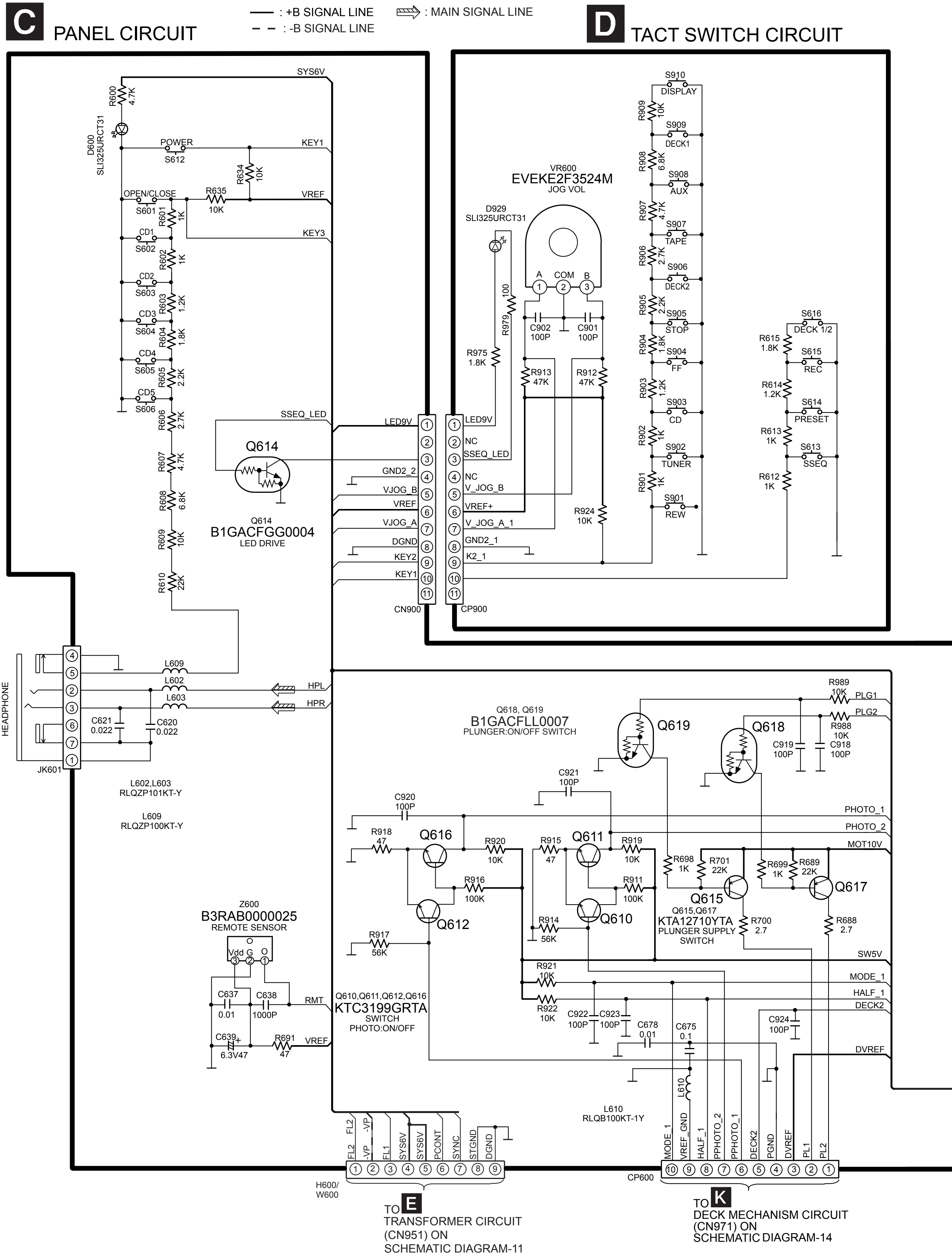
⇨ : RECORD SIGNAL LINE

B MAIN CIRCUIT



D301
B0BC7R500001
C303
1000P
C302
0.01
D301
TGND
+15V
+15V
DO/ST
R302
10K
DO/ST
SD
SD
+9.0V
R303
27
+7.5V
DVREF+
R454
4.7K
2A
TO B TUNER/MAIN CIRCUIT (1A) ON SCHEMATIC DIAGRAM-3
REF
AUXL
CDL
CDR
PBL
PBR
REC_L
REC_R
R411
5.6K
R410
82
C404
220P
R211
5.6K
C204
220P
R210
82
R415
47K
C405
220P
R414
1K
R215
47K
C205
220P
R214
1K
R416
100K
R417
47K
R217
47K
R216
100K
R279
8.2K
LM_RIN
R479
8.2K
LM_LIN
R213
47K
R413
47K
R212
1K
RCH
R301
4.7K
CE
LCH
PLLDA
R412
1K
DO/ST
PLLCLK
2B
TO B TUNER/MAIN CIRCUIT (1B) ON SCHEMATIC DIAGRAM-3
PLLCE
R354
100
PLLDA
PLLCLK/
C310
6.3V100
REF IN
C311
6.3V100
REF OUT
C406
16V10
IN A1
C407
16V10
IN B1
C408
16V10
IN C1
C409
16V10
IN D1
VCUT
C412
16V10
REC1
C411
16V10
A_VOLIN1
C413
50V0.47
TBI1
R419
1.5K
C414
50V0.47
TBO1
IC300
R420
3K
C415
0.22
TMI1
C416
0.22
TMO1
C417
1500P
TT1
C418
16V10
TOUT1
B_VOLIN1
IC300
C1BB00000747
AUDIO SOUND PROCESSOR
C419
0.47
BB_A1
C420
0.47
BB_B1
R422
680
OUT1
C305
16V220
VCC
C336
0.1
DATA
R421
56K
C308
120P
OUT1
REF
+9.0V
SUR1
C304
50V1
SUR2
R305
6.8K
IN A2
C206
16V10
IN B2
C207
16V10
IN C2
C208
16V10
IN D2
C209
16V10
AUXR
MIC IN
REC2
C212
16V10
A_VOLIN2
C211
16V10
TBI2
C213
50V0.47
TBO2
C214
50V0.47
R219
1.5K
TMI2
C215
0.22
TMO2
C216
0.22
R220
3K
TT2
C217
1500P
TOUT2
C218
16V10
BVOLIN2
BB_A2
C219
0.47
BB_B2
C220
0.47
OUT2
R222
680
R221
56K
GND
CLOCK
C307
120P
OUT2
REF
R307
2.2K
ASP_CLK
R308
1.2K
ASP_DAT
+9.0V
D304
DCDET
DC_DET
MUTE_H
R819
2.2K
MUTE_H
+15V
+15V
HI_L
HIGH_LIN
HI_R
HIGH_RIN
A_GND
LO_L
LOW_LIN
LO_R
LOW_RIN
AGND
T GND
CN300
TO I POWER CIRCUIT (CN500) ON SCHEMATIC DIAGRAM-12
D303
D305
CD7.5V
P_GND
D_GND
UP GND
D306
D302
CD8V
CD8V
LED9V
LED9V
MOT10V
MOT10V
+9V
+9V
-9V
-9V
SW5V
SW5V
CN301
TO I POWER CIRCUIT (CN501) ON SCHEMATIC DIAGRAM-12
D302
B0ACCK000005
D303-D305
B0ADCJ000020
D306
B0EAKM000117

SCHEMATIC DIAGRAM - 9

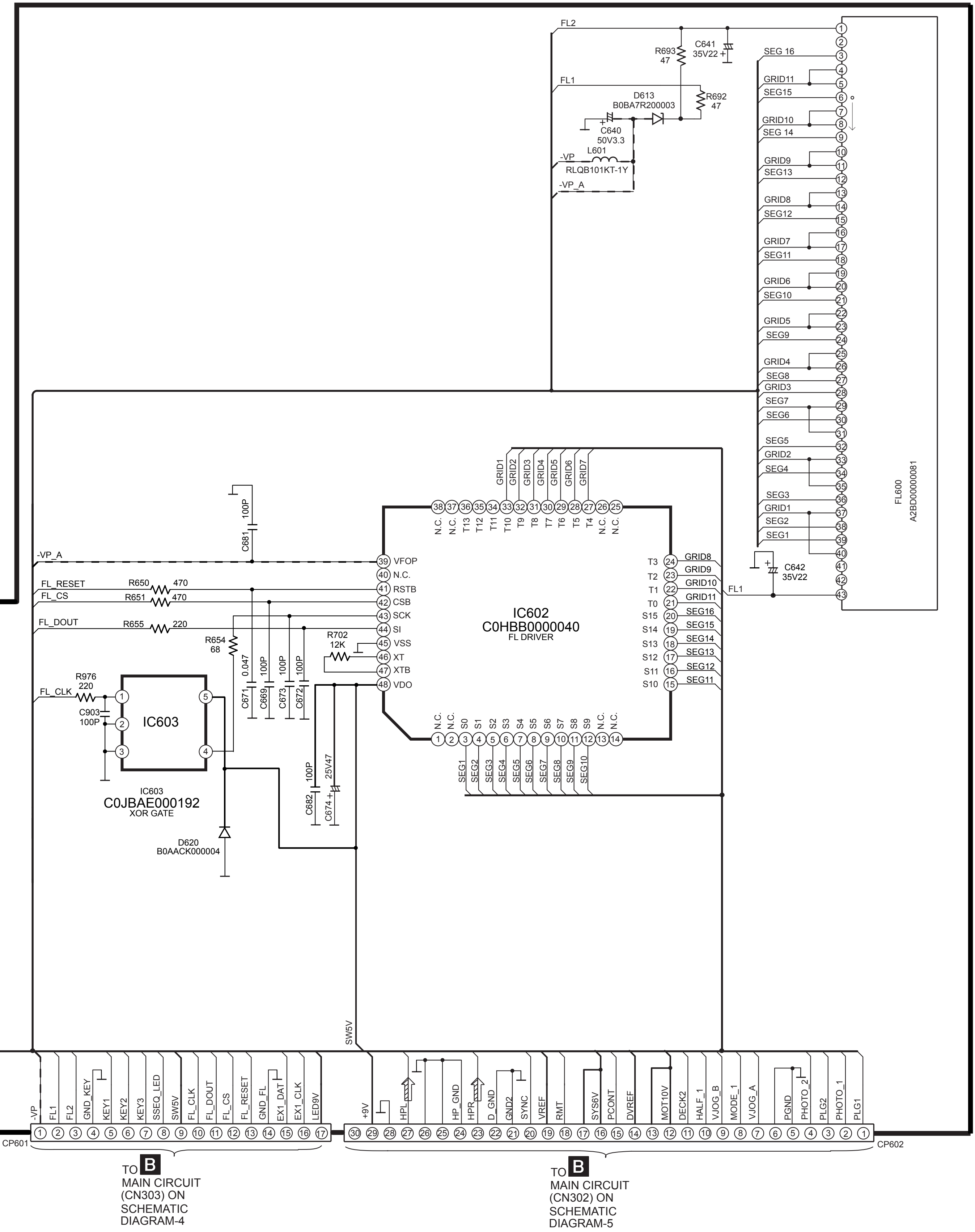


C PANEL CIRCUIT
: +B SIGNAL LINE
: -B SIGNAL LINE
: MAIN SIGNAL LINE
D TACT SWITCH CIRCUIT
SYS6V
R600 4.7K
D600 SLI325URCT31
POWER S612
KEY1
R634 10K
OPEN/CLOSE S601
R635 10K
VREF
R601 1K
KEY3
CD1 S602
R602 1K
CD2 S603
R603 1.2K
CD3 S604
R604 1.8K
CD4 S605
R605 2.2K
CD5 S606
R606 2.7K
R607 4.7K
R608 6.8K
R609 10K
R610 22K
SSEQ_LED
Q614
Q614 B1GACFGG0004 LED DRIVE
LED9V
GND2_2
VJOG_B
VREF
VJOG_A
DGND
KEY2
KEY1
CN900
CP900
LED9V
NC
SSEQ_LED
NC
V_JOG_B
VREF+
V_JOG_A_1
GND2_1
K2_1
VR600 EVEKE2F3524M JOG VOL
A COM B
D929 SLI325URCT31
R979 100
R975 1.8K
C902 100P
C901 100P
R913 47K
R912 47K
R924 10K
S910 DISPLAY
R909 10K
S909 DECK1
R908 6.8K
S908 AUX
R907 4.7K
S907 TAPE
R906 2.7K
S906 DECK2
R905 2.2K
S905 STOP
R904 1.8K
S904 FF
R903 1.2K
S903 CD
R902 1K
S902 TUNER
R901 1K
S901 REW
S616 DECK 1/2
R615 1.8K
S615 REC
R614 1.2K
S614 PRESET
R613 1K
S613 SSEQ
R612 1K
HEADPHONE
JK601
L609
L602
L603
HPL
HPR
C621 0.022
C620 0.022
L602,L603 RLQZP101KT-Y
L609 RLQZP100KT-Y
Q618, Q619 B1GACFLL0007 PLUNGER:ON/OFF SWITCH
Q619
Q618
R989 10K
PLG1
PLG2
R988 10K
C919 100P
C918 100P
C921 100P
C920 100P
PHOTO_1
PHOTO_2
MOT10V
R918 47
Q616
R920 10K
R915 47
Q611
R919 10K
R698 1K
R701 22K
R699 1K
R689 22K
Q617
R916 100K
R911 100K
Q615
Q615,Q617 KTA12710YTA PLUNGER SUPPLY SWITCH
Q612
Q610
R914 56K
R700 2.7
R688 2.7
R917 56K
SW5V
Z600 B3RAB0000025 REMOTE SENSOR
Vdd G O
R921 10K
MODE_1
HALF_1
DECK2
R922 10K
C637 0.01
C638 1000P
RMT
Q610,Q611,Q612,Q616 KTC3199GRTA SWITCH PHOTO:ON/OFF
C922 100P
C923 100P
C678 0.01
C675 0.1
C924 100P
C639 6.3V47
R691 47
VREF
DVREF
L610
L610 RLQB100KT-1Y
FL2 -VP
FL2 -VP FL1 SYS6V SYS6V PCONT SYNC STGND DGND
H600/ W600
MODE_1 VREF_GND HALF_1 PPHOTO_2 PPHOTO_1 DECK2 PGND DVREF PL1 PL2
CP600
TO E TRANSFORMER CIRCUIT (CN951) ON SCHEMATIC DIAGRAM-11
TO K DECK MECHANISM CIRCUIT (CN971) ON SCHEMATIC DIAGRAM-14

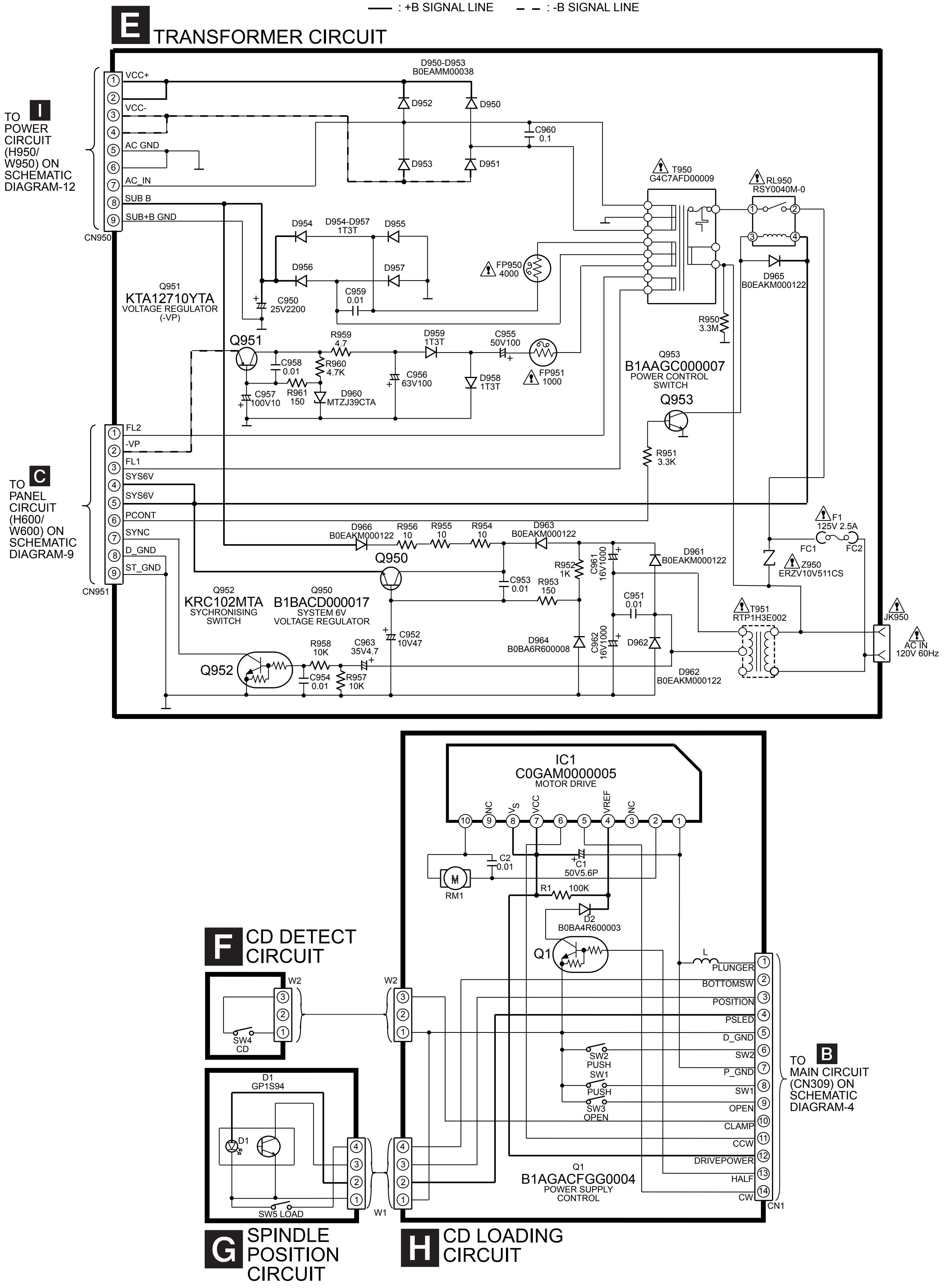
SCHEMATIC DIAGRAM - 10

—— : +B SIGNAL LINE   – – : -B SIGNAL LINE   ⇨ : MAIN SIGNAL LINE

C PANEL CIRCUIT


FL2
FL1
R693 47
C641 35V22
D613 B0BA7R200003
R692 47
C640 50V3.3
L601
RLQB101KT-1Y
-VP
-VP_A
SEG 16
GRID11
SEG15
GRID10
SEG 14
GRID9
SEG13
GRID8
SEG12
GRID7
SEG11
GRID6
SEG10
GRID5
SEG9
GRID4
SEG8
GRID3
SEG7
SEG6
SEG5
GRID2
SEG4
SEG3
GRID1
SEG2
SEG1
C642 35V22
FL600
A2BD00000081
GRID1 GRID2 GRID3 GRID4 GRID5 GRID6 GRID7
N.C. N.C. T13 T12 T11 T10 T9 T8 T7 T6 T5 T4 N.C. N.C.
C681 100P
FL_RESET
R650 470
FL_CS
R651 470
FL_DOUT
R655 220
R654 68
R702 12K
39 VFOP
40 N.C.
41 RSTB
42 CSB
43 SCK
44 SI
45 VSS
46 XT
47 XTB
48 VDO
IC602
C0HBB0000040
FL DRIVER
T3 24 GRID8
T2 23 GRID9
T1 22 GRID10
T0 21 GRID11
S15 20 SEG16
S14 19 SEG15
S13 18 SEG14
S12 17 SEG13
S11 16 SEG12
S10 15 SEG11
N.C. N.C. S0 S1 S2 S3 S4 S5 S6 S7 S8 S9 N.C. N.C.
SEG1 SEG2 SEG3 SEG4 SEG5 SEG6 SEG7 SEG8 SEG9 SEG10
C671 0.047
C669 100P
C673 100P
C672 100P
C682 100P
C674 25V47
R976 220
FL_CLK
C903 100P
IC603
IC603
C0JBAE000192
XOR GATE
D620
B0AACK000004
SW5V
-VP FL1 FL2 GND_KEY KEY1 KEY2 KEY3 SSEQ_LED SW5V FL_CLK FL_DOUT FL_CS FL_RESET GND_FL EX1_DAT EX1_CLK LED9V
CP601
+9V HPL HP_GND HPR D_GND GND2 SYNC VREF RMT SYS6V PCONT DVREF MOT10V DECK2 HALF_1 VJOG_B MODE_1 VJOG_A PGND PHOTO_2 PLG2 PHOTO_1 PLG1
CP602
TO B
MAIN CIRCUIT
(CN303) ON
SCHEMATIC
DIAGRAM-4
TO B
MAIN CIRCUIT
(CN302) ON
SCHEMATIC
DIAGRAM-5

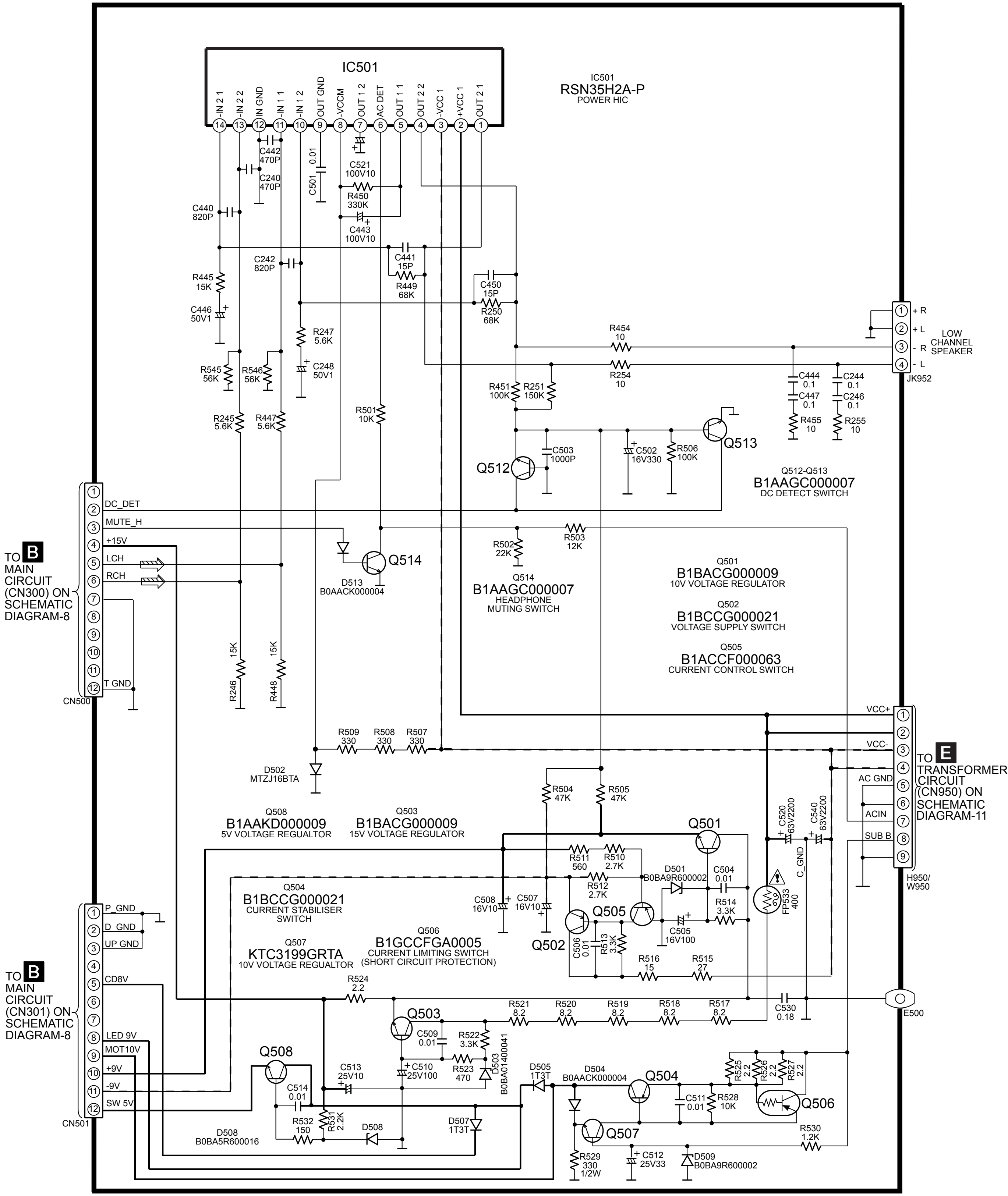
SCHEMATIC DIAGRAM - 11


: +B SIGNAL LINE
: -B SIGNAL LINE
E
TRANSFORMER CIRCUIT
TO I POWER CIRCUIT (H950/ W950) ON SCHEMATIC DIAGRAM-12
VCC+
VCC-
AC GND
AC_IN
SUB B
SUB+B GND
CN950
D950-D953
B0EAMM00038
D952
D950
D953
D951
C960
0.1
T950
G4C7AFD00009
RL950
RSY0040M-0
D954
D954-D957
1T3T
D955
D956
D957
C959
0.01
FP950
4000
D965
B0EAKM000122
Q951
KTA12710YTA
VOLTAGE REGULATOR
(-VP)
C950
25V2200
R950
3.3M
R959
4.7
D959
1T3T
C955
50V100
Q951
C958
0.01
R960
4.7K
C956
63V100
D958
1T3T
FP951
1000
Q953
B1AAGC000007
POWER CONTROL
SWITCH
Q953
C957
100V10
R961
150
D960
MTZJ39CTA
R951
3.3K
TO C PANEL CIRCUIT (H600/ W600) ON SCHEMATIC DIAGRAM-9
FL2
-VP
FL1
SYS6V
SYS6V
PCONT
SYNC
D_GND
ST_GND
CN951
D966
B0EAKM000122
R956
10
R955
10
R954
10
D963
B0EAKM000122
F1
125V 2.5A
FC1
FC2
Q950
D961
B0EAKM000122
Z950
ERZV10V511CS
R952
1K
C961
16V1000
C953
0.01
R953
150
C951
0.01
T951
RTP1H3E002
JK950
AC IN
120V 60Hz
Q952
KRC102MTA
SYCHRONISING
SWITCH
Q950
B1BACD000017
SYSTEM 6V
VOLTAGE REGULATOR
C952
10V47
D964
B0BA6R600008
C962
16V1000
D962
R958
10K
C963
35V4.7
Q952
C954
0.01
R957
10K
D962
B0EAKM000122
IC1
C0GAM0000005
MOTOR DRIVE
NC
Vs
VCC
VREF
NC
C2
0.01
C1
50V5.6P
RM1
R1
100K
D2
B0BA4R600003
Q1
L
PLUNGER
BOTTOMSW
POSITION
PSLED
D_GND
SW2
P_GND
SW1
OPEN
CLAMP
CCW
DRIVEPOWER
HALF
CW
CN1
TO B MAIN CIRCUIT (CN309) ON SCHEMATIC DIAGRAM-4
SW2
PUSH
SW1
PUSH
SW3
OPEN
Q1
B1AGACFGG0004
POWER SUPPLY
CONTROL
F
CD DETECT
CIRCUIT
W2
W2
SW4
CD
D1
GP1S94
D1
SW5 LOAD
W1
G
SPINDLE
POSITION
CIRCUIT
H
CD LOADING
CIRCUIT

SCHEMATIC DIAGRAM - 12

—— : +B SIGNAL LINE   – – : -B SIGNAL LINE   ⇨ : MAIN SIGNAL LINE

I POWER CIRCUIT



IC501
-IN 2 1
-IN 2 2
IN GND
-IN 1 1
-IN 1 2
OUT GND
-VCCM
OUT 1 2
AC DET
OUT 1 1
OUT 2 2
-VCC 1
+VCC 1
OUT 2 1
IC501
RSN35H2A-P
POWER HIC
C442 470P
C240 470P
C501 0.01
C521 100V10
R450 330K
C443 100V10
C440 820P
C242 820P
C441 15P
R449 68K
C450 15P
R250 68K
R445 15K
C446 50V1
R247 5.6K
C248 50V1
R545 56K
R546 56K
R245 5.6K
R447 5.6K
R501 10K
R454 10
R254 10
R451 100K
R251 150K
C444 0.1
C447 0.1
C244 0.1
C246 0.1
R455 10
R255 10
+ R
+ L
- R
- L
LOW CHANNEL SPEAKER
JK952
C503 1000P
C502 16V330
R506 100K
Q512
Q513
Q512-Q513
B1AAGC000007
DC DETECT SWITCH
DC_DET
MUTE_H
+15V
LCH
RCH
T GND
CN500
TO B MAIN CIRCUIT (CN300) ON SCHEMATIC DIAGRAM-8
Q514
D513
B0AACK000004
R502 22K
R503 12K
Q514
B1AAGC000007
HEADPHONE MUTING SWITCH
Q501
B1BACG000009
10V VOLTAGE REGULATOR
Q502
B1BCCG000021
VOLTAGE SUPPLY SWITCH
Q505
B1ACCF000063
CURRENT CONTROL SWITCH
R246 15K
R448 15K
R509 330
R508 330
R507 330
D502
MTZJ16BTA
VCC+
VCC-
AC GND
ACIN
SUB B
TO E TRANSFORMER CIRCUIT (CN950) ON SCHEMATIC DIAGRAM-11
H950/
W950
R504 47K
R505 47K
Q508
B1AAKD000009
5V VOLTAGE REGUALTOR
Q503
B1BACG000009
15V VOLTAGE REGULATOR
Q501
C520 63V2200
C540 63V2200
C_GND
R511 560
R510 2.7K
D501
B0BA9R600002
C504 0.01
R512 2.7K
R514 3.3K
FP533 400
Q504
B1BCCG000021
CURRENT STABILISER SWITCH
C508 16V10
C507 16V10
Q505
C505 16V100
Q502
C506 0.01
R513 3.3K
R516 15
R515 27
Q506
B1GCCFGA0005
CURRENT LIMITING SWITCH
(SHORT CIRCUIT PROTECTION)
Q507
KTC3199GRTA
10V VOLTAGE REGUALTOR
P_GND
D_GND
UP GND
CD8V
LED 9V
MOT10V
+9V
-9V
SW 5V
CN501
TO B MAIN CIRCUIT (CN301) ON SCHEMATIC DIAGRAM-8
R524 2.2
R521 8.2
R520 8.2
R519 8.2
R518 8.2
R517 8.2
C530 0.18
E500
Q503
C509 0.01
R522 3.3K
D503
B0BA01400041
C510 25V100
R523 470
Q508
C513 25V10
C514 0.01
R532 150
R531 2.2K
D508
D508
B0BA5R600016
D507 1T3T
D505 1T3T
D504
B0AACK000004
Q504
C511 0.01
R528 10K
R525 2.2
R526 2.2
R527 2.2
Q506
Q507
R530 1.2K
R529 330 1/2W
C512 25V33
D509
B0BA9R600002

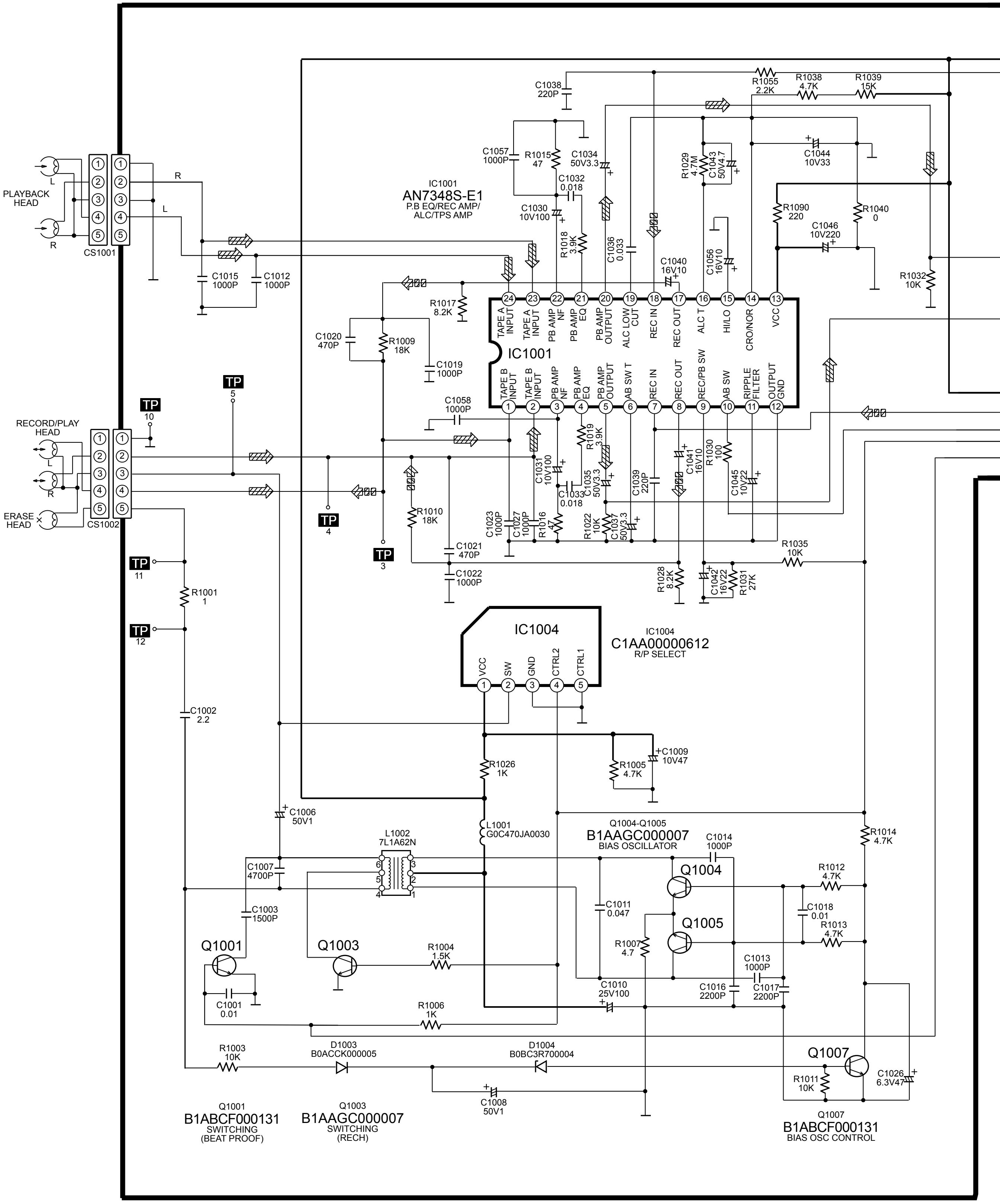
SCHEMATIC DIAGRAM -13

—— : +B SIGNAL LINE

▨⇨ : PLAYBACK SIGNAL LINE

▨⇨ : RECORD SIGNAL LINE

J DECK CIRCUIT



PLAYBACK HEAD
L
R
CS1001
R
L
C1015 1000P
C1012 1000P
C1038 220P
R1055 2.2K
R1038 4.7K
R1039 15K
C1057 1000P
R1015 47
C1034 50V3.3
C1032 0.018
C1030 10V100
R1018 3.9K
C1036 0.033
C1040 16V10
R1029 4.7M
C1043 50V4.7
C1056 16V10
C1044 10V33
R1090 220
C1046 10V220
R1040 0
R1032 10K
IC1001
AN7348S-E1
P.B EQ/REC AMP/ ALC/TPS AMP
R1017 8.2K
C1020 470P
R1009 18K
C1019 1000P
TAPE A INPUT
TAPE A INPUT
PB AMP NF
PB AMP EQ
PB AMP OUTPUT
ALC LOW CUT
REC IN
REC OUT
ALC T
HI/LO
CRO/NOR
VCC
IC1001
TAPE B INPUT
TAPE B INPUT
PB AMP NF
PB AMP EQ
PB AMP OUTPUT
AB SW T
REC IN
REC OUT
REC/PB SW
AB SW
RIPPLE FILTER
OUTPUT GND
TP 5
TP 10
RECORD/PLAY HEAD
L
R
ERASE HEAD
CS1002
C1058 1000P
R1019 3.9K
C1031 10V100
C1033 0.018
C1035 50V3.3
C1039 220P
C1041 16V10
R1030 100
C1045 10V22
R1010 18K
C1023 1000P
C1027 1000P
R1016 47
R1022 10K
C1037 50V3.3
TP 4
TP 3
C1021 470P
C1022 1000P
R1028 8.2K
C1042 16V22
R1031 27K
R1035 10K
TP 11
R1001 1
TP 12
IC1004
VCC
SW
GND
CTRL2
CTRL1
IC1004
C1AA00000612
R/P SELECT
C1002 2.2
C1009 10V47
R1026 1K
R1005 4.7K
C1006 50V1
L1001 G0C470JA0030
L1002 7L1A62N
Q1004-Q1005
B1AAGC000007
BIAS OSCILLATOR
C1014 1000P
R1014 4.7K
C1007 4700P
Q1004
R1012 4.7K
C1011 0.047
C1018 0.01
Q1005
R1013 4.7K
C1003 1500P
R1007 4.7
Q1001
Q1003
R1004 1.5K
C1013 1000P
C1010 25V100
C1016 2200P
C1017 2200P
C1001 0.01
R1006 1K
R1003 10K
D1003 B0ACCK000005
D1004 B0BC3R700004
Q1007
C1026 6.3V47
R1011 10K
C1008 50V1
Q1001
B1ABCF000131
SWITCHING (BEAT PROOF)
Q1003
B1AAGC000007
SWITCHING (RECH)
Q1007
B1ABCF000131
BIAS OSC CONTROL

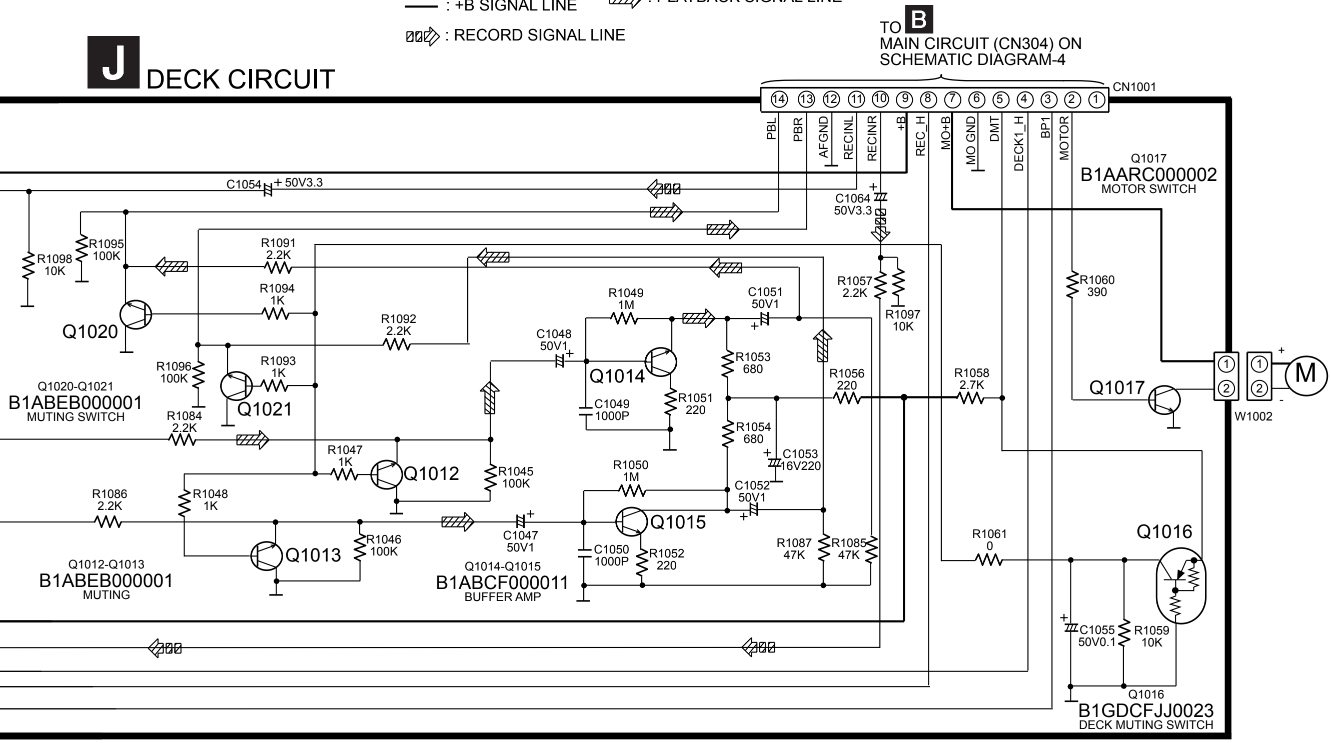
SCHEMATIC DIAGRAM - 14

—— : +B SIGNAL LINE

⇨ : PLAYBACK SIGNAL LINE

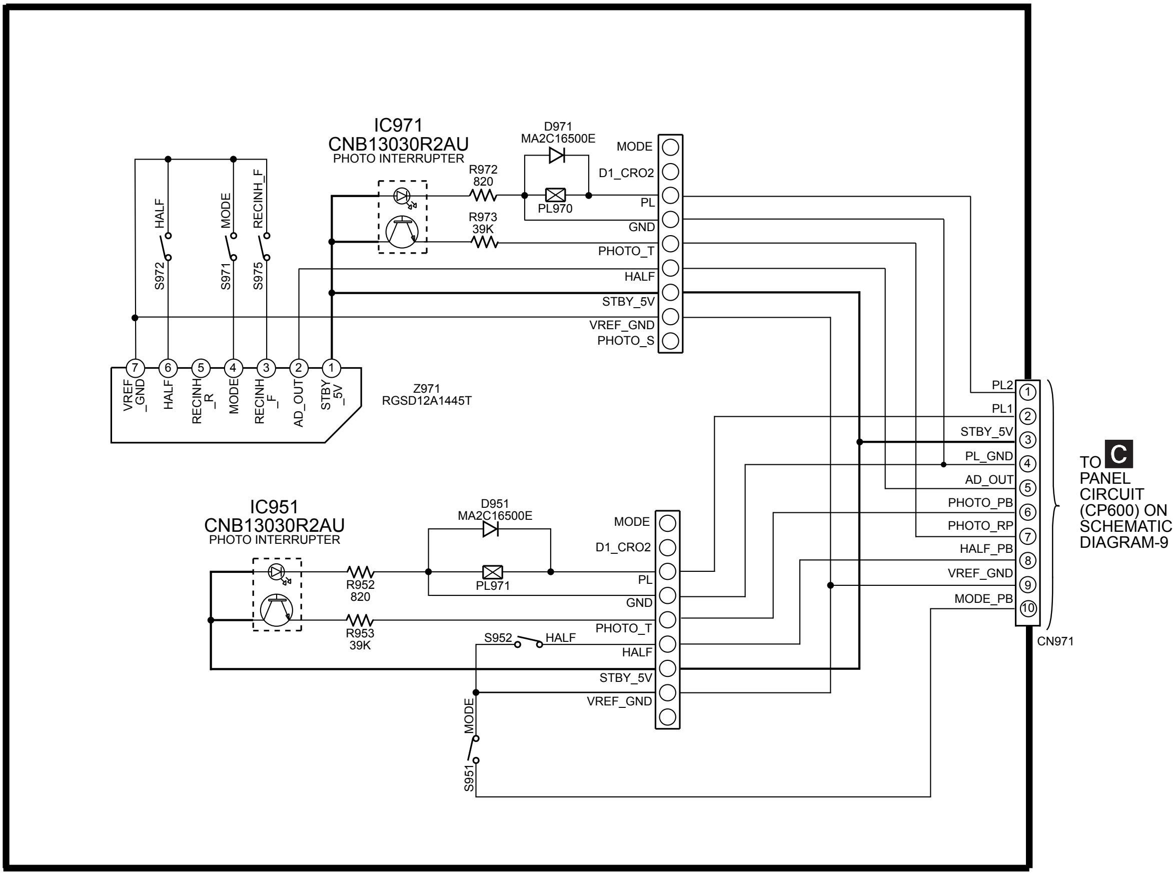
⇨ : RECORD SIGNAL LINE

J DECK CIRCUIT

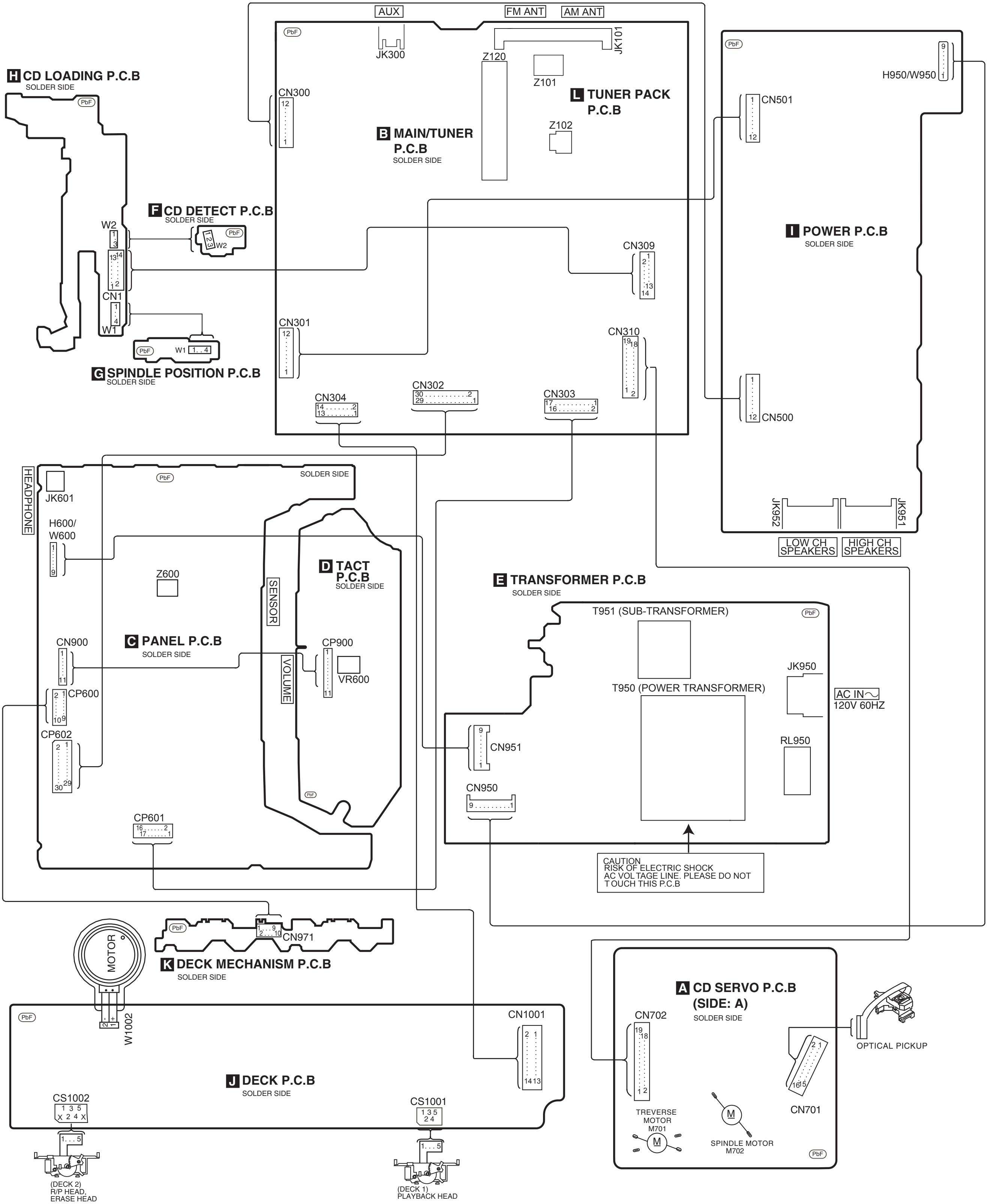


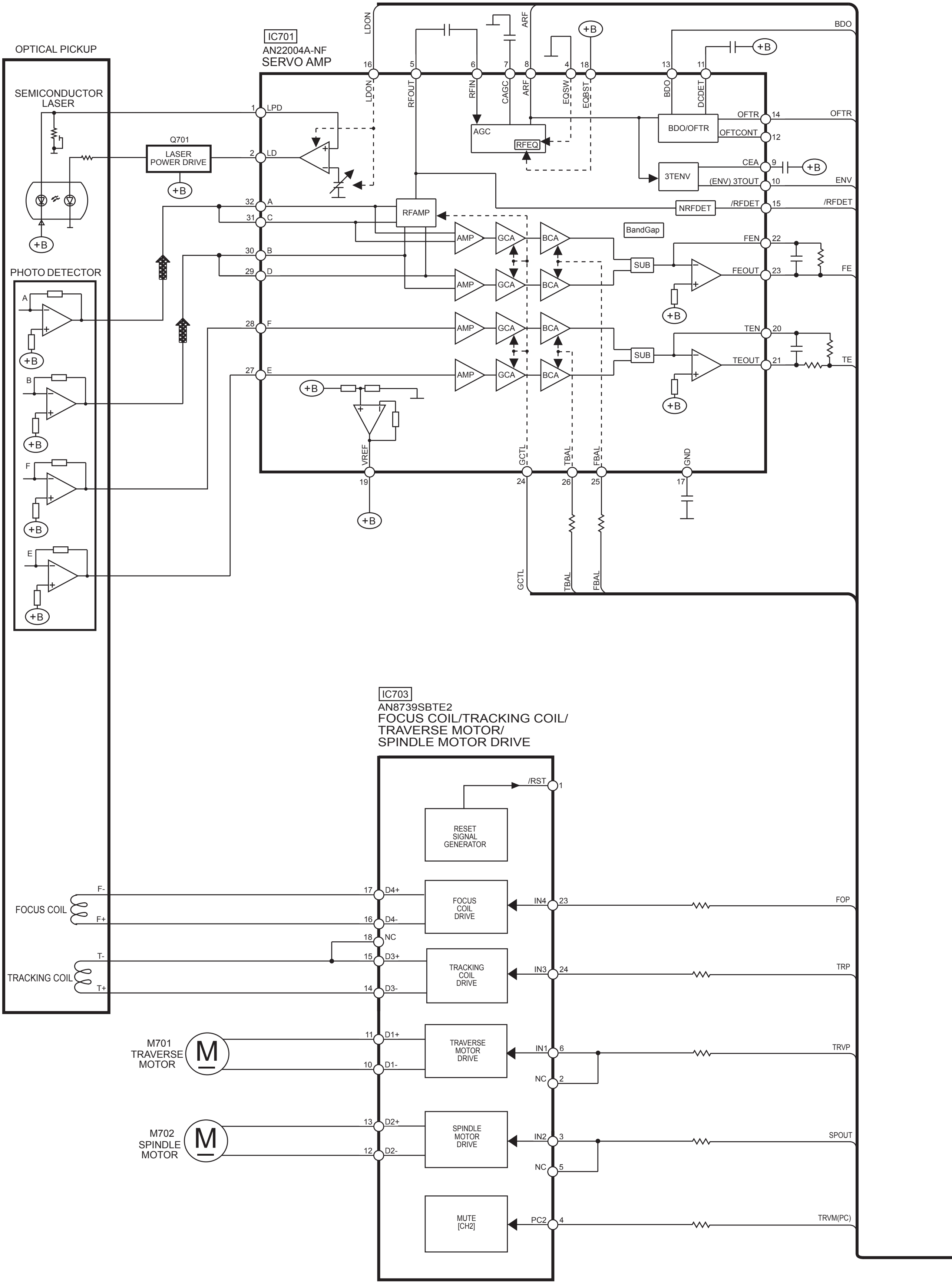
TO B
MAIN CIRCUIT (CN304) ON
SCHEMATIC DIAGRAM-4
CN1001
⑭ ⑬ ⑫ ⑪ ⑩ ⑨ ⑧ ⑦ ⑥ ⑤ ④ ③ ② ①
PBL
PBR
AFGND
RECINL
RECINR
+B
REC_H
MO+B
MO GND
DMT
DECK1_H
BP1
MOTOR
Q1017
B1AARC000002
MOTOR SWITCH
C1054 + 50V3.3
C1064 50V3.3
R1098 10K
R1095 100K
R1091 2.2K
R1094 1K
R1092 2.2K
R1093 1K
R1096 100K
Q1020
Q1021
Q1020-Q1021
B1ABEB000001
MUTING SWITCH
R1084 2.2K
R1047 1K
Q1012
R1045 100K
R1086 2.2K
R1048 1K
Q1013
R1046 100K
Q1012-Q1013
B1ABEB000001
MUTING
C1047 50V1
C1048 50V1
R1049 1M
Q1014
C1049 1000P
R1051 220
C1051 50V1
R1053 680
R1054 680
C1053 16V220
R1050 1M
C1052 50V1
Q1015
C1050 1000P
R1052 220
Q1014-Q1015
B1ABCF000011
BUFFER AMP
R1087 47K
R1085 47K
R1057 2.2K
R1097 10K
R1056 220
R1058 2.7K
R1060 390
Q1017
① ②
① ②
W1002
M
+
-
R1061 0
Q1016
C1055 50V0.1
R1059 10K
Q1016
B1GDCFJJ0023
DECK MUTING SWITCH

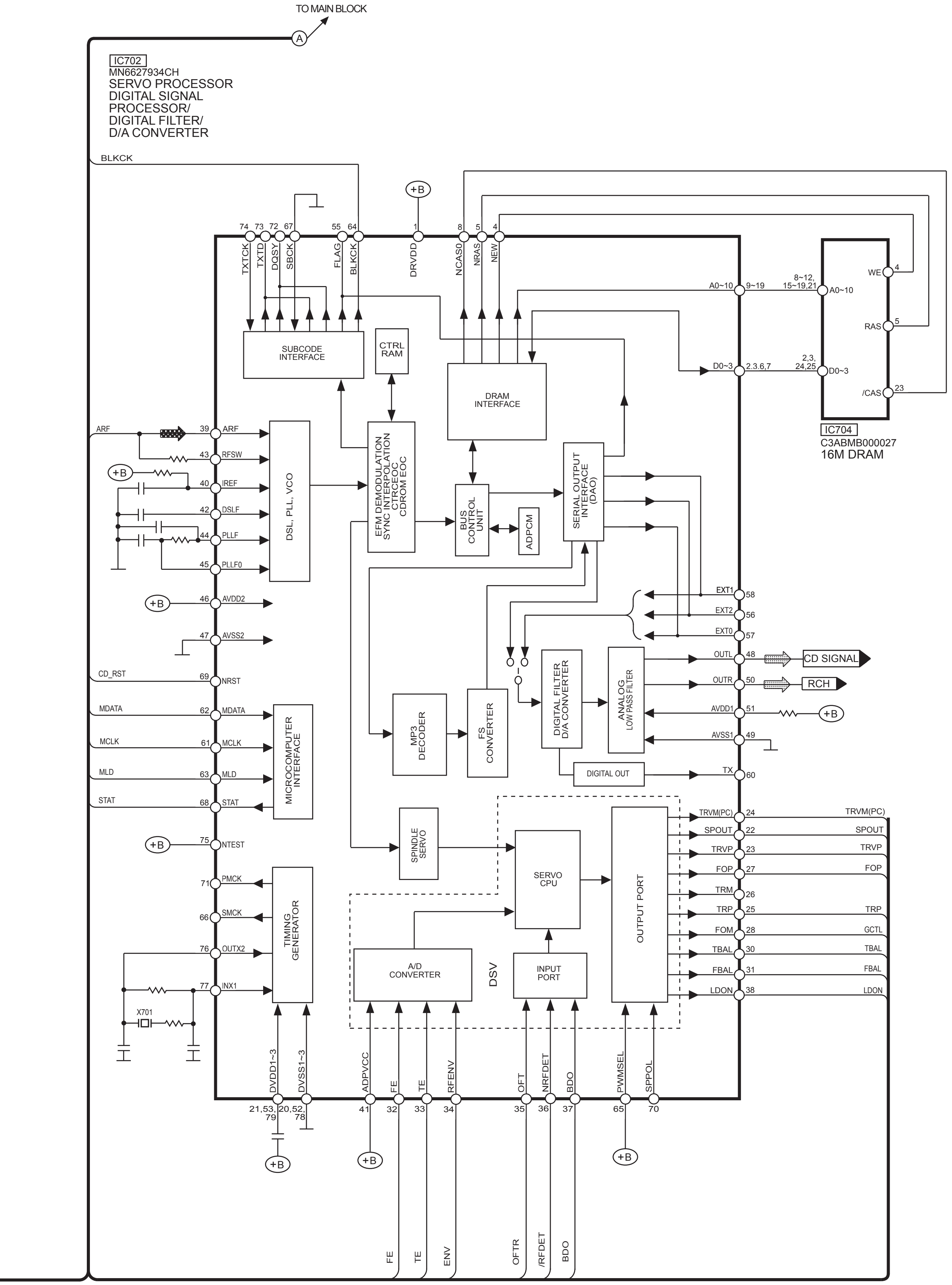
K DECK MECHANISM CIRCUIT

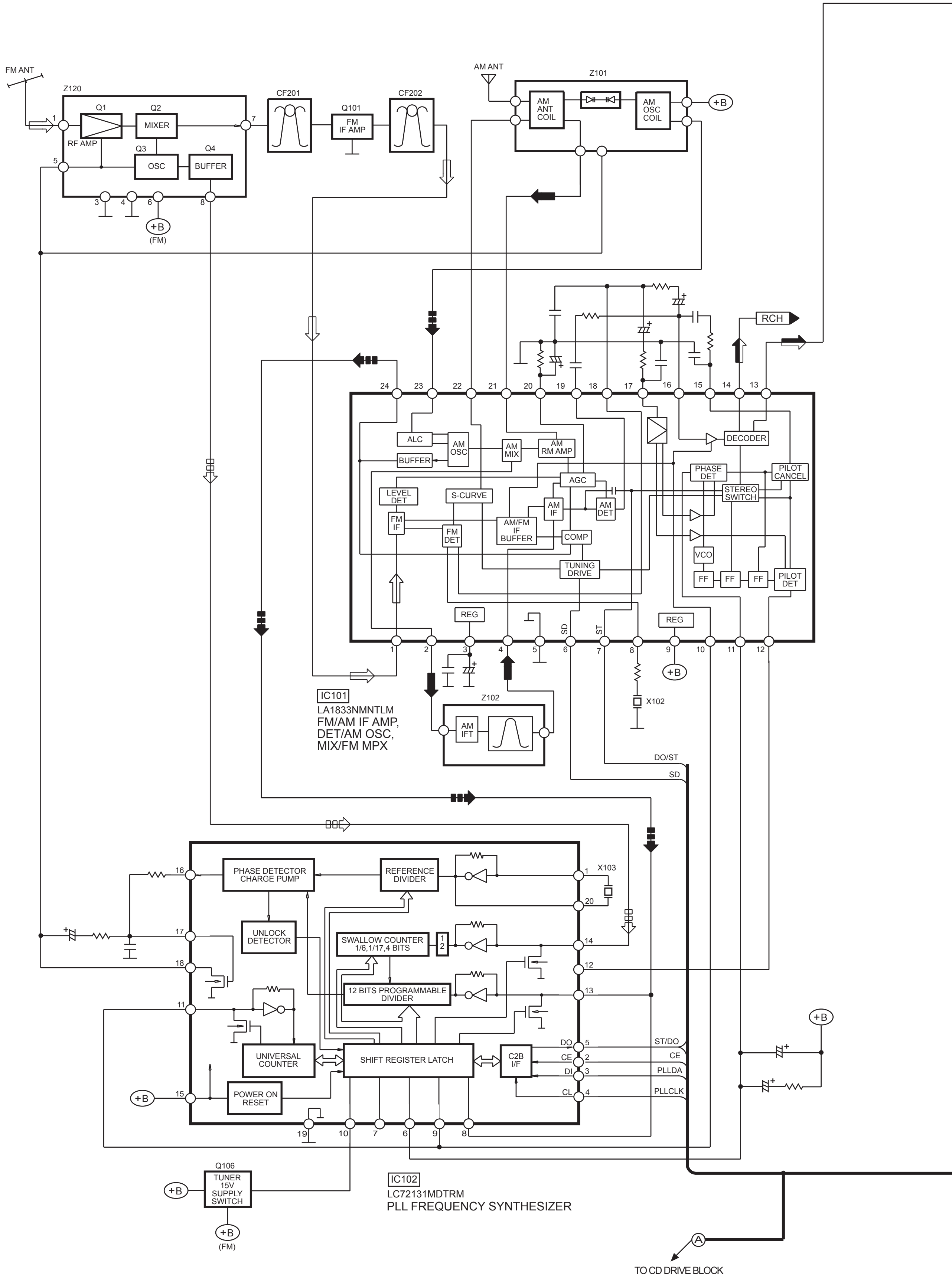


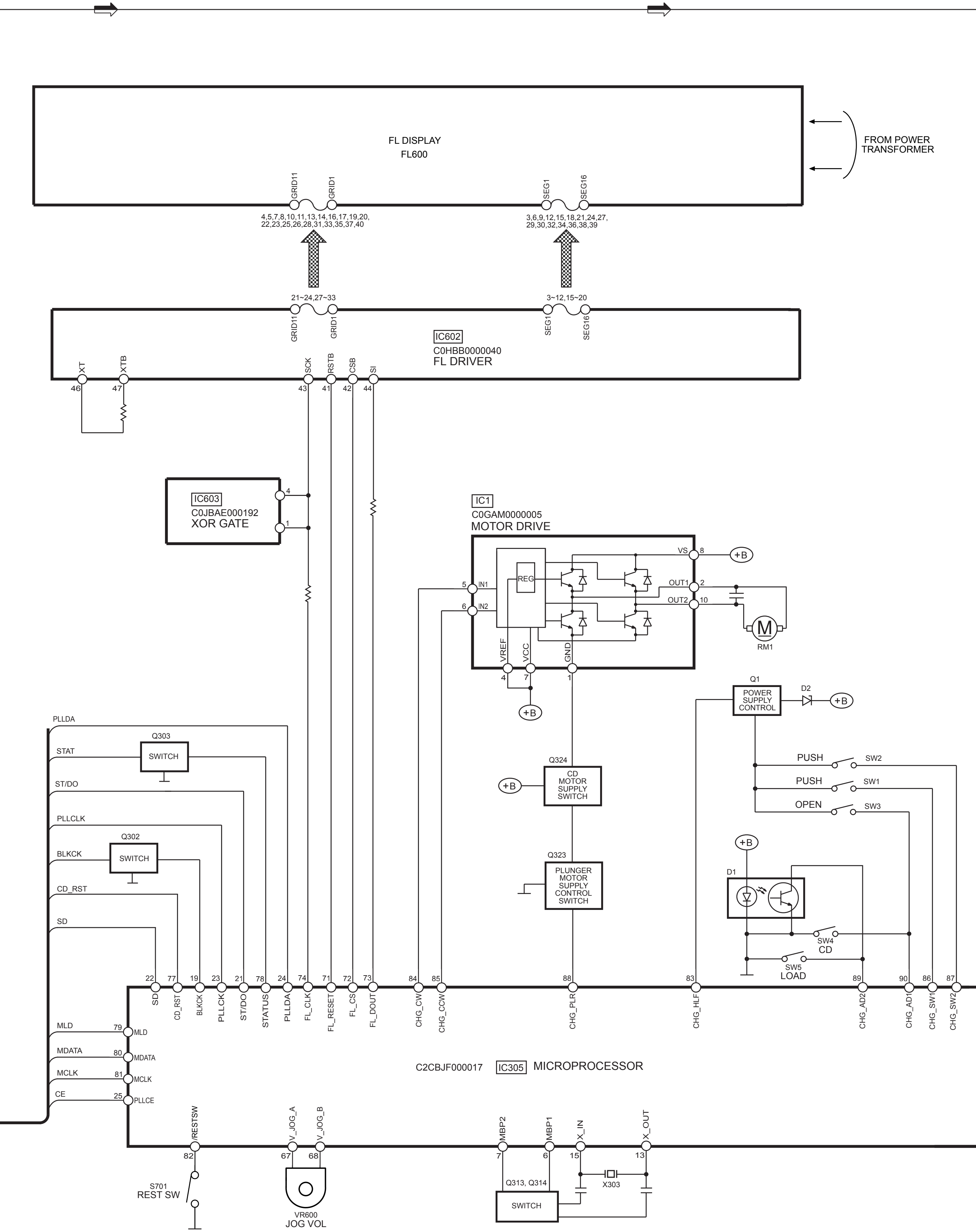
IC971
CNB13030R2AU
PHOTO INTERRUPTER
D971
MA2C16500E
R972 820
PL970
R973 39K
HALF
MODE
RECINH_F
S972
S971
S975
MODE
D1_CRO2
PL
GND
PHOTO_T
HALF
STBY_5V
VREF_GND
PHOTO_S
⑦ ⑥ ⑤ ④ ③ ② ①
VREF _GND
HALF
RECINH _R
MODE
RECINH _F
AD_OUT
STBY _5V
Z971
RGSD12A1445T
IC951
CNB13030R2AU
PHOTO INTERRUPTER
D951
MA2C16500E
R952 820
PL971
R953 39K
S952
HALF
MODE
S951
MODE
D1_CRO2
PL
GND
PHOTO_T
HALF
STBY_5V
VREF_GND
PL2 ①
PL1 ②
STBY_5V ③
PL_GND ④
AD_OUT ⑤
PHOTO_PB ⑥
PHOTO_RP ⑦
HALF_PB ⑧
VREF_GND ⑨
MODE_PB ⑩
CN971
TO C
PANEL CIRCUIT (CP600) ON SCHEMATIC DIAGRAM-9

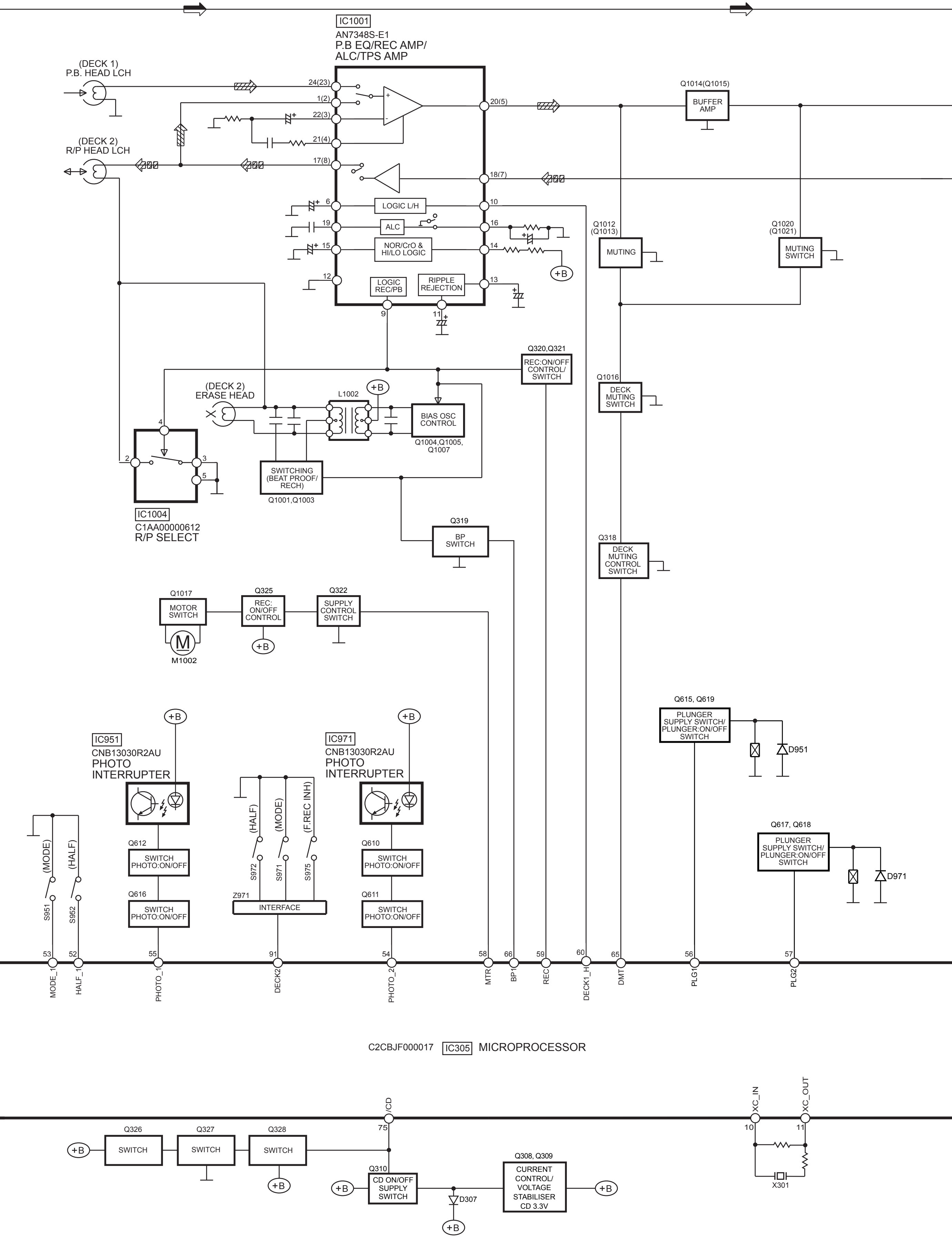

AUX
FM ANT
AM ANT
PbF
JK300
JK101
Z120
Z101
L TUNER PACK P.C.B
Z102
CN300
12
1
B MAIN/TUNER P.C.B
SOLDER SIDE
H CD LOADING P.C.B
SOLDER SIDE
F CD DETECT P.C.B
SOLDER SIDE
W2
CN1
W1
G SPINDLE POSITION P.C.B
SOLDER SIDE
CN309
CN301
CN310
CN304
CN302
CN303
I POWER P.C.B
SOLDER SIDE
H950/W950
CN501
CN500
JK952
JK951
LOW CH SPEAKERS
HIGH CH SPEAKERS
HEADPHONE
JK601
H600/ W600
Z600
C PANEL P.C.B
SOLDER SIDE
CN900
CP600
CP602
CP601
SENSOR
VOLUME
D TACT P.C.B
SOLDER SIDE
CP900
VR600
E TRANSFORMER P.C.B
SOLDER SIDE
T951 (SUB-TRANSFORMER)
JK950
AC IN∼
120V 60HZ
T950 (POWER TRANSFORMER)
RL950
CN951
CN950
CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE. PLEASE DO NOT
TOUCH THIS P.C.B
MOTOR
CN971
K DECK MECHANISM P.C.B
SOLDER SIDE
W1002
CN1001
J DECK P.C.B
SOLDER SIDE
CS1002
CS1001
(DECK 2)
R/P HEAD,
ERASE HEAD
(DECK 1)
PLAYBACK HEAD
A CD SERVO P.C.B
(SIDE: A)
SOLDER SIDE
CN702
OPTICAL PICKUP
CN701
TREVERSE MOTOR
M701
SPINDLE MOTOR
M702

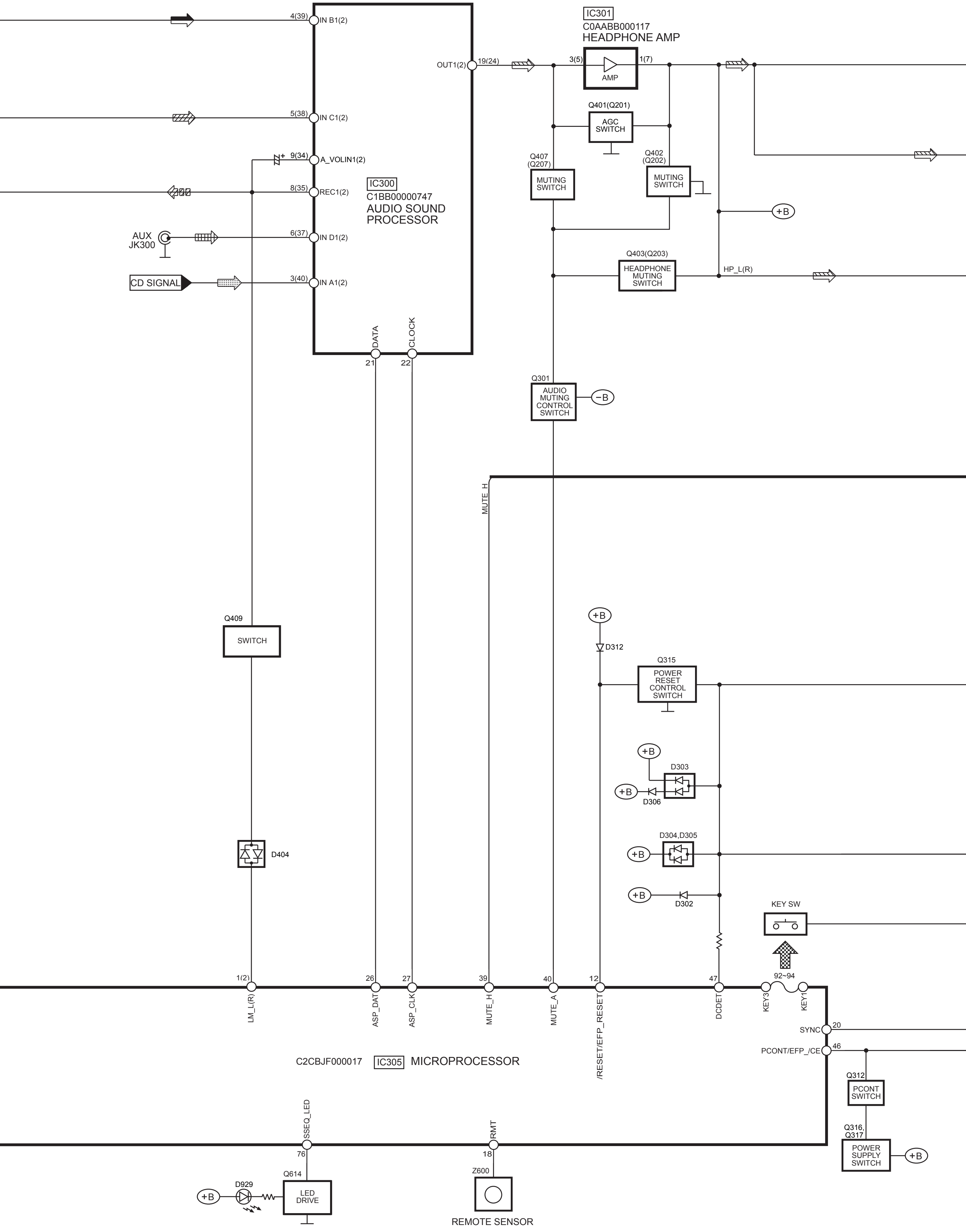

OPTICAL PICKUP
SEMICONDUCTOR LASER
PHOTO DETECTOR
A
B
F
E
+B
Q701
LASER POWER DRIVE
IC701
AN22004A-NF
SERVO AMP
LDON
RFOUT
RFIN
CAGC
ARF
EQSW
EQBST
BDO
DCDET
1 LPD
2 LD
32 A
31 C
30 B
29 D
28 F
27 E
16
5
6
7
8
4
18
13
11
AGC
RFEQ
BDO/OFTR
OFTR 14
OFTCONT 12
CEA 9
3TENV
(ENV) 3TOUT 10
NRFDET
/RFDET 15
RFAMP
BandGap
AMP
GCA
BCA
SUB
FEN 22
FEOUT 23
TEN 20
TEOUT 21
VREF
GCTL
TBAL
FBAL
GND
19
24
26
25
17
BDO
OFTR
ENV
/RFDET
FE
TE
IC703
AN8739SBTE2
FOCUS COIL/TRACKING COIL/
TRAVERSE MOTOR/
SPINDLE MOTOR DRIVE
/RST 1
RESET SIGNAL GENERATOR
FOCUS COIL DRIVE
TRACKING COIL DRIVE
TRAVERSE MOTOR DRIVE
SPINDLE MOTOR DRIVE
MUTE [CH2]
17 D4+
16 D4-
18 NC
15 D3+
14 D3-
11 D1+
10 D1-
13 D2+
12 D2-
IN4 23
IN3 24
IN1 6
NC 2
IN2 3
NC 5
PC2 4
FOCUS COIL
F-
F+
TRACKING COIL
T-
T+
M701
TRAVERSE MOTOR
M702
SPINDLE MOTOR
M
FOP
TRP
TRVP
SPOUT
TRVM(PC)

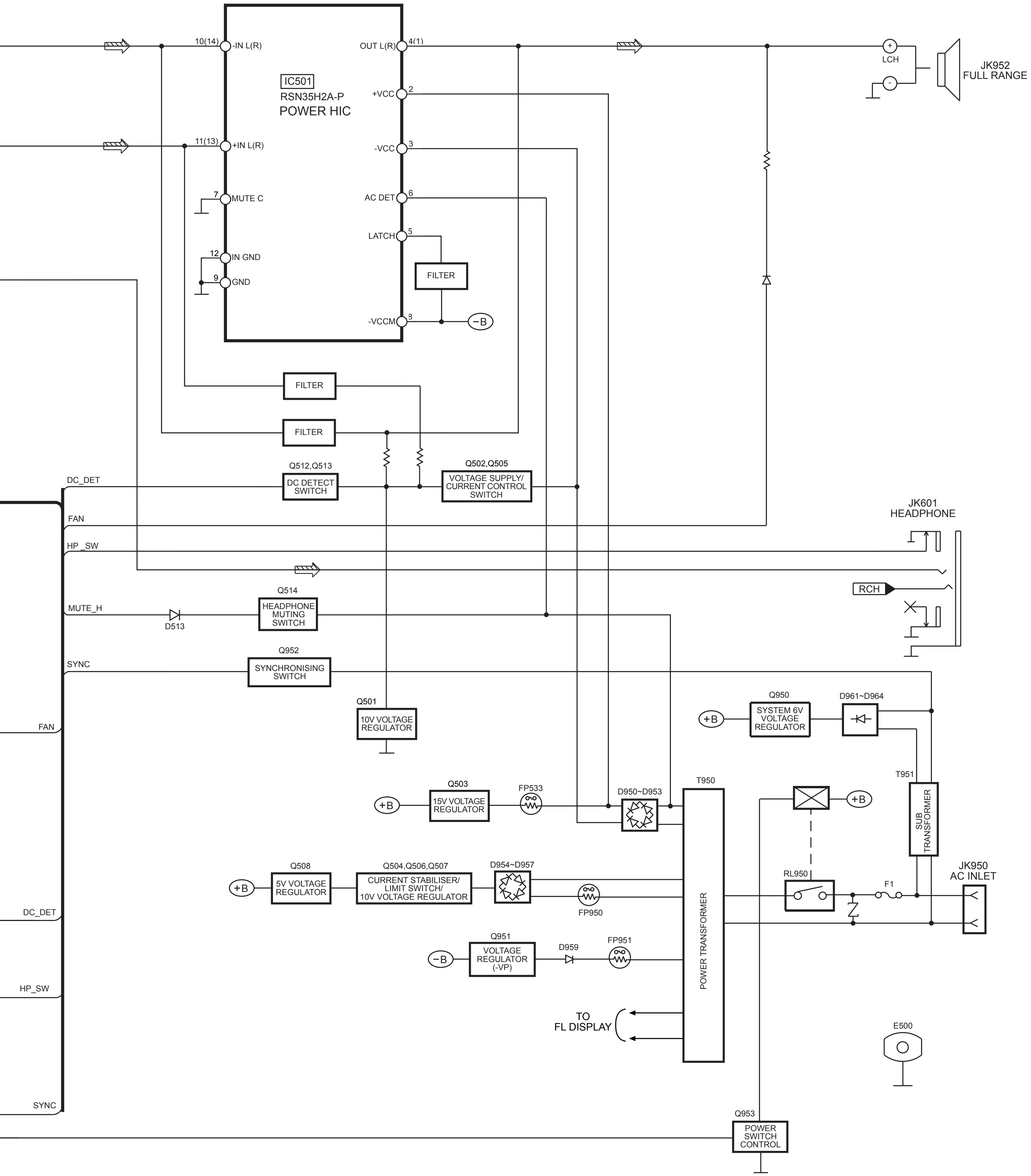

TO MAIN BLOCK
A
IC702
MN6627934CH
SERVO PROCESSOR
DIGITAL SIGNAL
PROCESSOR/
DIGITAL FILTER/
D/A CONVERTER
BLCKCK
+B
74 TXTCK
73 TXTD
72 DQSY
67 SBCK
55 FLAG
64 BLKCK
1 DRVDD
8 NCAS0
5 NRAS
4 NEW
SUBCODE INTERFACE
CTRL RAM
DRAM INTERFACE
A0~10 9~19
8~12, 15~19,21 A0~10
D0~3 2.3.6,7
2,3, 24,25 D0~3
WE 4
RAS 5
/CAS 23
IC704
C3ABMB000027
16M DRAM
ARF
39 ARF
43 RFSW
40 IREF
42 DSLF
44 PLLF
45 PLLF0
DSL, PLL, VCO
EFM DEMODULATION SYNC INTERPOLATION CTRCEOC CDROM EOC
BUS CONTROL UNIT
ADPCM
SERIAL OUTPUT INTERFACE (DAO)
46 AVDD2
47 AVSS2
EXT1 58
EXT2 56
EXT0 57
CD_RST
69 NRST
MDATA
62 MDATA
MCLK
61 MCLK
MLD
63 MLD
STAT
68 STAT
MICROCOMPUTER INTERFACE
MP3 DECODER
FS CONVERTER
DIGITAL FILTER D/A CONVERTER
ANALOG LOW PASS FILTER
OUTL 48
CD SIGNAL
OUTR 50
RCH
AVDD1 51
AVSS1 49
DIGITAL OUT
TX 60
75 NTEST
71 PMCK
66 SMCK
76 OUTX2
77 INX1
X701
TIMING GENERATOR
SPINDLE SERVO
SERVO CPU
OUTPUT PORT
A/D CONVERTER
DSV
INPUT PORT
TRVM(PC) 24 TRVM(PC)
SPOUT 22 SPOUT
TRVP 23 TRVP
FOP 27 FOP
TRM 26
TRP 25 TRP
FOM 28 GCTL
TBAL 30 TBAL
FBAL 31 FBAL
LDON 38 LDON
DVDD1~3 21,53, 79
DVSS1~3 20,52, 78
ADPVCC 41
FE 32
TE 33
RFENV 34
OFT 35
NRFDET 36
BDO 37
PWMSEL 65
SPPOL 70
FE
TE
ENV
OFTR
/RFDET
BDO


FM ANT
Z120
Q1
Q2
MIXER
RF AMP
Q3
OSC
Q4
BUFFER
+B
(FM)
CF201
Q101
FM IF AMP
CF202
AM ANT
Z101
AM ANT COIL
AM OSC COIL
+B
RCH
ALC
AM OSC
BUFFER
AM MIX
AM RM AMP
AGC
LEVEL DET
S-CURVE
FM IF
FM DET
AM/FM IF BUFFER
AM IF
AM DET
COMP
TUNING DRIVE
DECODER
PHASE DET
PILOT CANCEL
STEREO SWITCH
VCO
FF
FF
FF
PILOT DET
REG
REG
SD
ST
+B
X102
IC101
LA1833NMNTLM
FM/AM IF AMP, DET/AM OSC, MIX/FM MPX
Z102
AM IFT
DO/ST
SD
PHASE DETECTOR CHARGE PUMP
REFERENCE DIVIDER
X103
UNLOCK DETECTOR
SWALLOW COUNTER 1/6,1/17,4 BITS
1 2
12 BITS PROGRAMMABLE DIVIDER
UNIVERSAL COUNTER
SHIFT REGISTER LATCH
C2B I/F
POWER ON RESET
+B
DO
CE
DI
CL
ST/DO
CE
PLLDA
PLLCLK
+B
Q106
TUNER 15V SUPPLY SWITCH
+B
+B
(FM)
IC102
LC72131MDTRM
PLL FREQUENCY SYNTHESIZER
A
TO CD DRIVE BLOCK


FL DISPLAY
FL600
FROM POWER TRANSFORMER
GRID11
GRID1
SEG1
SEG16
4,5,7,8,10,11,13,14,16,17,19,20,
22,23,25,26,28,31,33,35,37,40
3,6,9,12,15,18,21,24,27,
29,30,32,34,36,38,39
21~24,27~33
3~12,15~20
GRID11
GRID1
SEG1
SEG16
IC602
C0HBB0000040
FL DRIVER
XT
XTB
SCK
RSTB
CSB
SI
46
47
43
41
42
44
IC603
C0JBAE000192
XOR GATE
4
1
IC1
C0GAM0000005
MOTOR DRIVE
VS
8
+B
OUT1
2
OUT2
10
5
IN1
6
IN2
REG
VREF
VCC
GND
4
7
1
+B
M
RM1
Q1
POWER SUPPLY CONTROL
D2
+B
PLLDA
Q303
STAT
SWITCH
ST/DO
PLLCLK
Q302
BLKCK
SWITCH
CD_RST
SD
Q324
+B
CD MOTOR SUPPLY SWITCH
Q323
PLUNGER MOTOR SUPPLY CONTROL SWITCH
PUSH
SW2
PUSH
SW1
OPEN
SW3
+B
D1
SW4
CD
SW5
LOAD
22
77
19
23
21
78
24
74
71
72
73
84
85
88
83
89
90
86
87
SD
CD_RST
BLKCK
PLLCK
ST/DO
STATUS
PLLDA
FL_CLK
FL_RESET
FL_CS
FL_DOUT
CHG_CW
CHG_CCW
CHG_PLR
CHG_HLF
CHG_AD2
CHG_AD1
CHG_SW1
CHG_SW2
MLD
79
MLD
MDATA
80
MDATA
MCLK
81
MCLK
CE
25
PLLCE
C2CBJF000017
IC305
MICROPROCESSOR
/RESTSW
V_JOG_A
V_JOG_B
MBP2
MBP1
X_IN
X_OUT
82
67
68
7
6
15
13
S701
REST SW
VR600
JOG VOL
Q313, Q314
SWITCH
X303


IC1001
AN7348S-E1
P.B EQ/REC AMP/
ALC/TPS AMP
(DECK 1)
P.B. HEAD LCH
(DECK 2)
R/P HEAD LCH
24(23)
1(2)
22(3)
21(4)
17(8)
20(5)
18(7)
6
19
15
12
10
16
14
13
9
11
LOGIC L/H
ALC
NOR/CrO &
HI/LO LOGIC
LOGIC
REC/PB
RIPPLE
REJECTION
+B
Q1014(Q1015)
BUFFER
AMP
Q1012
(Q1013)
MUTING
Q1020
(Q1021)
MUTING
SWITCH
Q320,Q321
REC:ON/OFF
CONTROL/
SWITCH
Q1016
DECK
MUTING
SWITCH
(DECK 2)
ERASE HEAD
L1002
+B
BIAS OSC
CONTROL
Q1004,Q1005,
Q1007
4
2
3
5
IC1004
C1AA00000612
R/P SELECT
SWITCHING
(BEAT PROOF/
RECH)
Q1001,Q1003
Q319
BP
SWITCH
Q318
DECK
MUTING
CONTROL
SWITCH
Q1017
MOTOR
SWITCH
M
M1002
Q325
REC:
ON/OFF
CONTROL
+B
Q322
SUPPLY
CONTROL
SWITCH
Q615, Q619
PLUNGER
SUPPLY SWITCH/
PLUNGER:ON/OFF
SWITCH
D951
Q617, Q618
PLUNGER
SUPPLY SWITCH/
PLUNGER:ON/OFF
SWITCH
D971
+B
IC951
CNB13030R2AU
PHOTO
INTERRUPTER
+B
IC971
CNB13030R2AU
PHOTO
INTERRUPTER
(MODE)
(HALF)
S951
S952
Q612
SWITCH
PHOTO:ON/OFF
Q616
SWITCH
PHOTO:ON/OFF
(HALF)
(MODE)
(F.REC INH)
S972
S971
S975
Z971
INTERFACE
Q610
SWITCH
PHOTO:ON/OFF
Q611
SWITCH
PHOTO:ON/OFF
53
52
55
91
54
58
66
59
60
65
56
57
MODE_1
HALF_1
PHOTO_1
DECK2
PHOTO_2
MTR
BP1
REC
DECK1_H
DMT
PLG1
PLG2
C2CBJF000017
IC305
MICROPROCESSOR
/CD
75
XC_IN
XC_OUT
10
11
Q326
SWITCH
Q327
SWITCH
Q328
SWITCH
+B
+B
Q310
CD ON/OFF
SUPPLY
SWITCH
+B
D307
+B
Q308, Q309
CURRENT
CONTROL/
VOLTAGE
STABILISER
CD 3.3V
+B
X301


IC301
C0AABB000117
HEADPHONE AMP
AMP
3(5)
1(7)
Q401(Q201)
AGC SWITCH
Q407 (Q207)
MUTING SWITCH
Q402 (Q202)
MUTING SWITCH
+B
Q403(Q203)
HEADPHONE MUTING SWITCH
HP_L(R)
Q301
AUDIO MUTING CONTROL SWITCH
−B
4(39)
IN B1(2)
5(38)
IN C1(2)
9(34)
A_VOLIN1(2)
8(35)
REC1(2)
6(37)
IN D1(2)
3(40)
IN A1(2)
OUT1(2)
19(24)
IC300
C1BB00000747
AUDIO SOUND PROCESSOR
AUX JK300
CD SIGNAL
DATA
CLOCK
21
22
MUTE_H
Q409
SWITCH
D404
+B
D312
Q315
POWER RESET CONTROL SWITCH
+B
D303
+B
D306
D304,D305
+B
+B
D302
KEY SW
92~94
1(2)
26
27
39
40
12
47
LM_L(R)
ASP_DAT
ASP_CLK
MUTE_H
MUTE_A
/RESET/EFP_RESET
DCDET
KEY3
KEY1
SYNC
20
PCONT/EFP_/CE
46
C2CBJF000017
IC305
MICROPROCESSOR
Q312
PCONT SWITCH
Q316, Q317
POWER SUPPLY SWITCH
+B
SSEQ_LED
76
RMT
18
Q614
LED DRIVE
D929
+B
Z600
REMOTE SENSOR


10(14)
-IN L(R)
OUT L(R)
4(1)
IC501
RSN35H2A-P
POWER HIC
+VCC
2
11(13)
+IN L(R)
-VCC
3
7
MUTE C
AC DET
6
LATCH
5
12
IN GND
9
GND
FILTER
-VCCM
8
−B
LCH
+
-
JK952
FULL RANGE
FILTER
FILTER
Q512,Q513
DC DETECT
SWITCH
Q502,Q505
VOLTAGE SUPPLY/
CURRENT CONTROL
SWITCH
DC_DET
FAN
HP_SW
JK601
HEADPHONE
RCH
Q514
MUTE_H
D513
HEADPHONE
MUTING
SWITCH
Q952
SYNC
SYNCHRONISING
SWITCH
Q501
10V VOLTAGE
REGULATOR
FAN
Q950
+B
SYSTEM 6V
VOLTAGE
REGULATOR
D961~D964
Q503
+B
15V VOLTAGE
REGULATOR
FP533
D950~D953
T950
T951
SUB
TRANSFORMER
+B
Q508
+B
5V VOLTAGE
REGULATOR
Q504,Q506,Q507
CURRENT STABILISER/
LIMIT SWITCH/
10V VOLTAGE REGULATOR
D954~D957
FP950
RL950
F1
JK950
AC INLET
DC_DET
Q951
−B
VOLTAGE
REGULATOR
(-VP)
D959
FP951
POWER TRANSFORMER
HP_SW
TO
FL DISPLAY
E500
SYNC
Q953
POWER
SWITCH
CONTROL

SIGNAL LINES

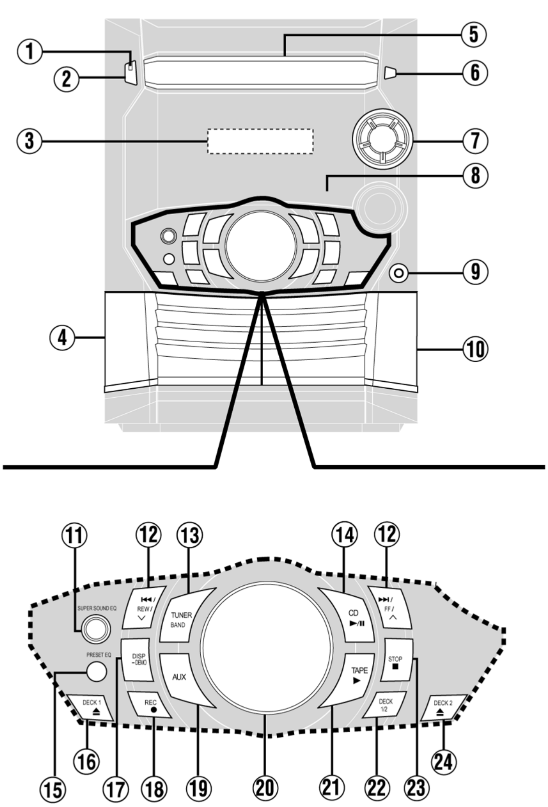
- MAIN SIGNAL LINE
- FM OSC SIGNAL LINE
- FM SIGNAL LINE
- CD SIGNAL LINE
- AM OSC SIGNAL LINE
- AUX SIGNAL LINE
- AM SIGNAL LINE
- FM & AM SIGNALS LINE
- CD-DA SIGNAL LINE
- PLAYBACK SIGNAL LINE
- RECORDING SIGNAL LINE

( ) Indicates the Pin No. of Right Channel.

NOTE : Signal lines are applicable to the Left Channel only.

Front panel controls

Main unit


①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
⑫
⑬
⑭
⑫
SUPER SOUND EQ
I◄◄ / REW / ∨
TUNER BAND
CD ►/II
►►I / FF / ∧
PRESET EQ
DISP –DEMO
AUX
TAPE ►
STOP ■
DECK 1 ⏏
REC ●
DECK 1/2
DECK 2 ⏏
⑯
㉔
⑮
⑰
⑱
⑲
⑳
㉑
㉒
㉓

① **AC supply indicator [AC IN]**
This indicator lights when the unit is connected to the AC power supply.

② **Standby/on switch [⏻/I, POWER]**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

③ **Display**

④ **Deck 1 cassette holder**

⑤ **Disc tray**

⑥ **CD tray open/close button [⏏, OPEN/CLOSE]**

⑦ **CD direct play buttons [1 ~ 5]**

⑧ **Remote control signal sensor**

⑨ **Headphones jack [PHONES]**

⑩ **Deck 2 cassette holder**

Center console

⑪ **Super sound EQ button [SUPER SOUND EQ]**

⑫ **CD skip/search, tape fast-forward/rewind, tune/preset channel select, time adjust buttons [I◄◄/REW/∨, ►►I/FF/∧]**

⑬ **Tuner/band select button [TUNER, BAND]**

⑭ **CD play/pause button [►/ II, CD]**

⑮ **Preset EQ select button [PRESET EQ]**

⑯ **Deck 1 open button [⏏, DECK 1]**

⑰ **Display, demonstration button [DISP, –DEMO]**

⑱ **Record button [●, REC]**

⑲ **AUX button [AUX]**

⑳ **Volume control [VOLUME DOWN, UP]**

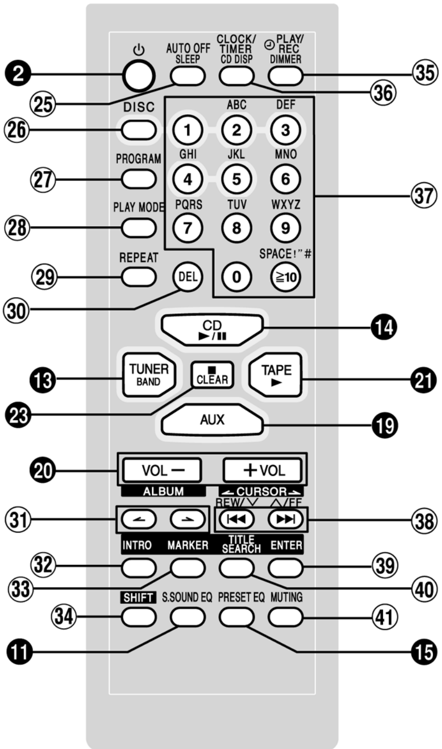
㉑ **Tape play button [►, TAPE]**

㉒ **Deck select button [DECK 1/2]**

㉓ **Stop/program clear button [■, STOP]**

㉔ **Deck 2 open button [⏏, DECK 2]**

Remote control


❷
⏻
AUTO OFF SLEEP
CLOCK/ TIMER CD DISP
PLAY/ REC DIMMER
㉟
㉕
㊱
DISC
㉖
ABC
DEF
1
2
3
PROGRAM
㉗
GHI
JKL
MNO
4
5
6
㊲
PLAY MODE
㉘
PQRS
TUV
WXYZ
7
8
9
SPACE!"#
REPEAT
㉙
DEL
0
≧10
㉚
CD ►/II
⓮
⓭
TUNER BAND
■ CLEAR
TAPE ►
㉑
㉓
AUX
⓳
⓴
VOL –
+ VOL
ALBUM
CURSOR
REW/∨
∧/FF
㉛
㊳
INTRO
MARKER
TITLE SEARCH
ENTER
㉜
㊴
㉝
㊵
SHIFT
S.SOUND EQ
PRESET EQ
MUTING
㉞
㊶
⓫
⓯

Buttons such as ❷ function in exactly the same way as the buttons on the main unit.

㉕ **Sleep timer + Auto off button [SLEEP, AUTO OFF]**

㉖ **Disc button [DISC]**

㉗ **Program button [PROGRAM]**

㉘ **Play mode select button [PLAY MODE]**
Use this for selecting CD play mode, tune mode, FM mode, AM beat proof and deck select.

㉙ **Repeat button [REPEAT]**

㉚ **Delete button [DEL]**

㉛ **Album skip buttons [↼ , ⇀ , ALBUM]**

㉜ **Intro button [INTRO]**

㉝ **Marker memory/recall button [MARKER]**

㉞ **Shift button [SHIFT]**
To use functions labeled in orange ※:
While pressing [SHIFT], press the corresponding button.
※ For buttons [AUTO OFF], [CLOCK/TIMER] and [◷PLAY/REC]

㉟ **Dimmer + Play timer/record timer button [DIMMER, ◷PLAY/REC]**

㊱ **CD display + Clock/timer button [CD DISP, CLOCK/TIMER]**

㊲ **Numbered, character buttons [≧10, 1–9, 0, A-Z, SPACE!"#]**

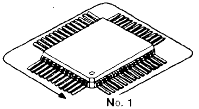
㊳ **CD skip/search, tape fast-forward/rewind, tune/preset channel select, time adjust, cursor buttons [I◄◄, REW/∨, ↼ CURSOR, ►►I, ∧/FF, CURSOR ⇀]**

㊴ **Enter button [ENTER]**

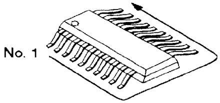
㊵ **Title search mode select button [TITLE SEARCH]**

㊶ **Muting button [MUTING]**

C0HBB0000040 (48P)
MN6627934CH (80P)



AN7348S-E1 (24P)
C1BB00000747 (42P)
C3ABMB000027 (26P)
LA1833NMNTLM (24P)
LC72131MDTRM (20P)



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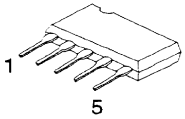
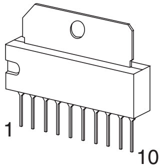


C0GAM0000005



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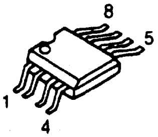

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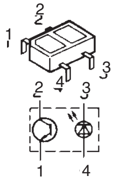

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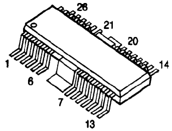
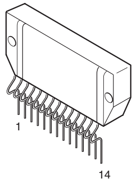

26
21
20
14
1
6
7
13

RSN35H2A-P



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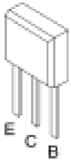

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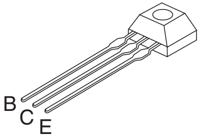

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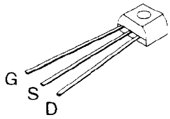

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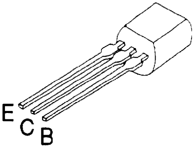

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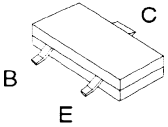

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B1GACFGG0004
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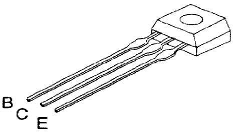
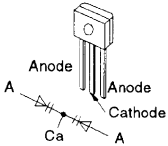
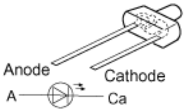
2SC2787FL1TA



SVC211SPA-AL


Anode
A
Anode
Cathode
Ca
A

B3AAA0000583


Anode
Cathode
A
Ca

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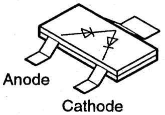
Anode
Cathode

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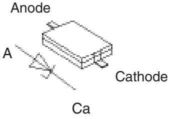
Anode
A
Cathode
Ca

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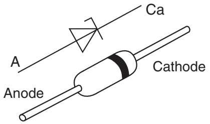
Ca
A
Cathode
Anode

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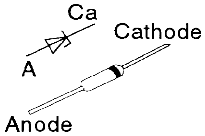
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Anode

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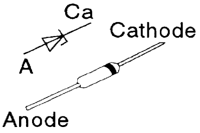
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Anode

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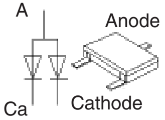
A
Anode
Ca
Cathode

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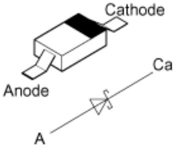
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Anode
Ca
A

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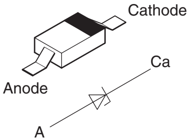
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Anode
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A

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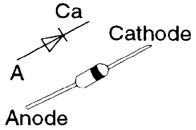
Ca
Cathode
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Anode

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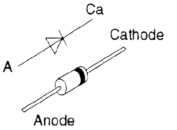
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Anode

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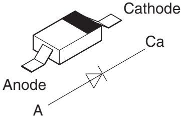
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Anode
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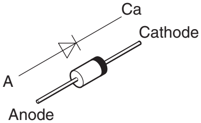
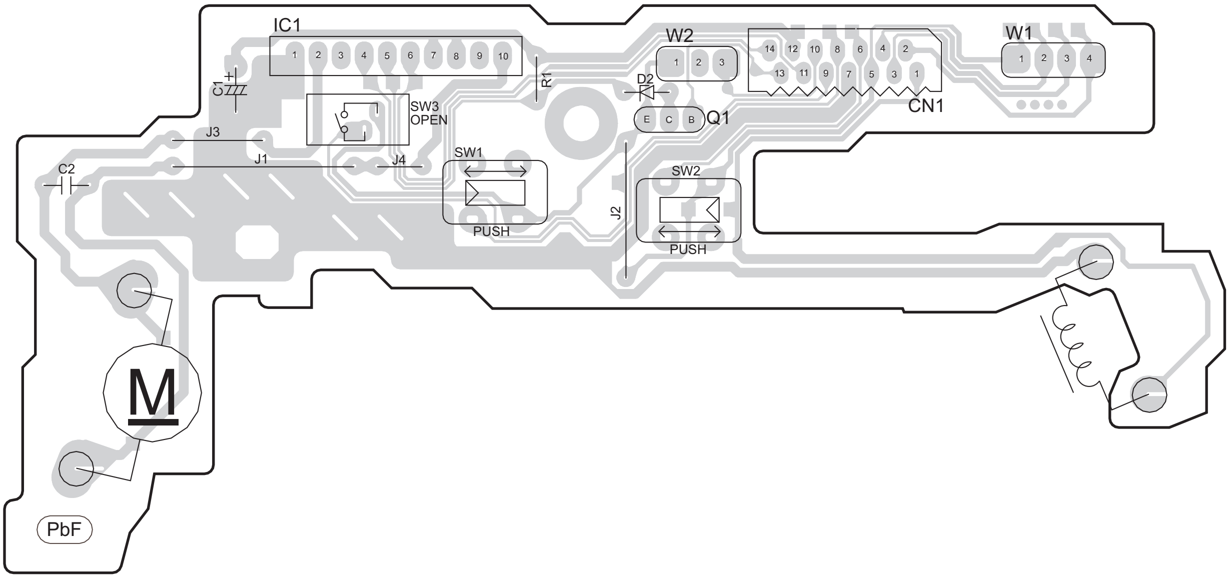

Ca
Cathode
A
Anode

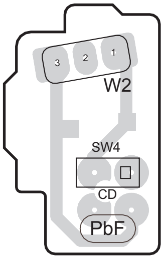
A B C D E F G

1 2 3 4 5 6 7 8 9

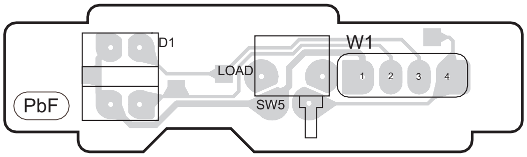
H CD LOADING P.C.B (REP2578A-N)


IC1
1
2
3
4
5
6
7
8
9
10
C1
R1
SW3
OPEN
W2
1
2
3
D2
Q1
E
C
B
14
12
10
8
6
4
2
13
11
9
7
5
3
1
CN1
W1
1
2
3
4
J3
J1
J4
C2
SW1
PUSH
J2
SW2
PUSH
M
PbF

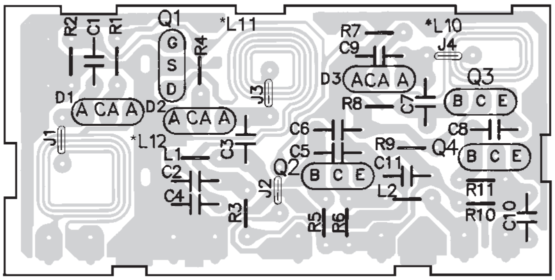
F CD DETECT P.C.B (REP2578A-N)


3
2
1
W2
SW4
CD
PbF

G SPINDLE POSITION P.C.B (REP2578A-N)

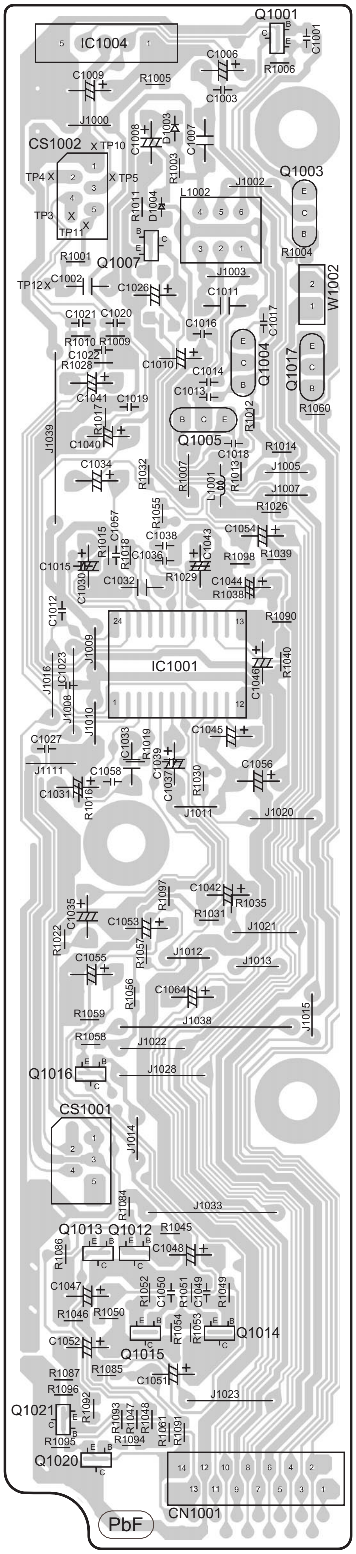

D1
LOAD
SW5
W1
1
2
3
4
PbF

L TUNER PACK P.C.B (REP1999B)


R2
C1
R1
Q1
G
S
D
R4
*L11
R7
C9
*L10
J4
D3
ACA A
Q3
B C E
D1
A CA A
D2
A CA A
J3
R8
C7
C6
C8
J1
*L12
L1
C3
C5
R9
Q4
B C E
Q2
B C E
C11
C2
C4
J2
L2
R11
R10
C10
R3
R5
R6

J DECK P.C.B. (REPX0331A)

K DECK MECHANISM P.C.B. (REPX0321A)


A
B
C
D
E
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G
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IC1004
Q1001
C1001
C1006
R1006
C1003
C1009
R1005
J1000
C1008
D1003
C1007
CS1002
TP10
TP4
TP5
TP3
TP11
R1003
Q1003
R1011
D1004
J1002
L1002
Q1007
R1001
R1004
W1002
TP12
C1002
C1026
J1003
C1011
C1021
C1020
C1017
C1016
R1010
R1009
C1022
R1028
C1010
Q1004
Q1017
C1014
C1041
C1019
C1013
R1060
R1017
R1012
Q1005
C1040
J1039
C1018
R1014
C1034
R1032
R1007
R1013
L1001
J1005
J1007
R1055
R1026
C1057
C1038
C1054
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R1098
R1039
C1015
C1030
C1032
R1029
C1044
R1038
C1012
IC1001
R1090
J1009
C1023
J1016
J1008
C1046
R1040
J1010
C1027
C1033
R1019
C1045
J1111
C1058
C1039
C1037
R1030
C1056
C1031
R1016
J1011
J1020
C1035
R1097
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R1022
C1053
R1031
J1021
C1055
R1057
J1012
J1013
R1056
C1064
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J1015
R1058
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J1033
Q1013
Q1012
R1045
R1086
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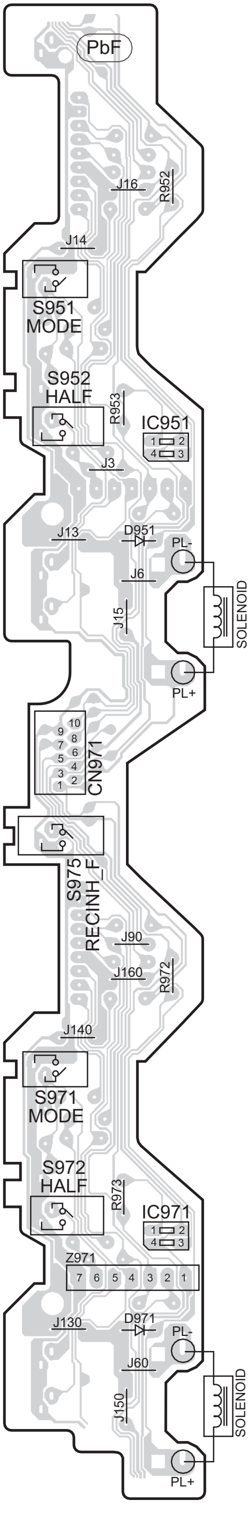
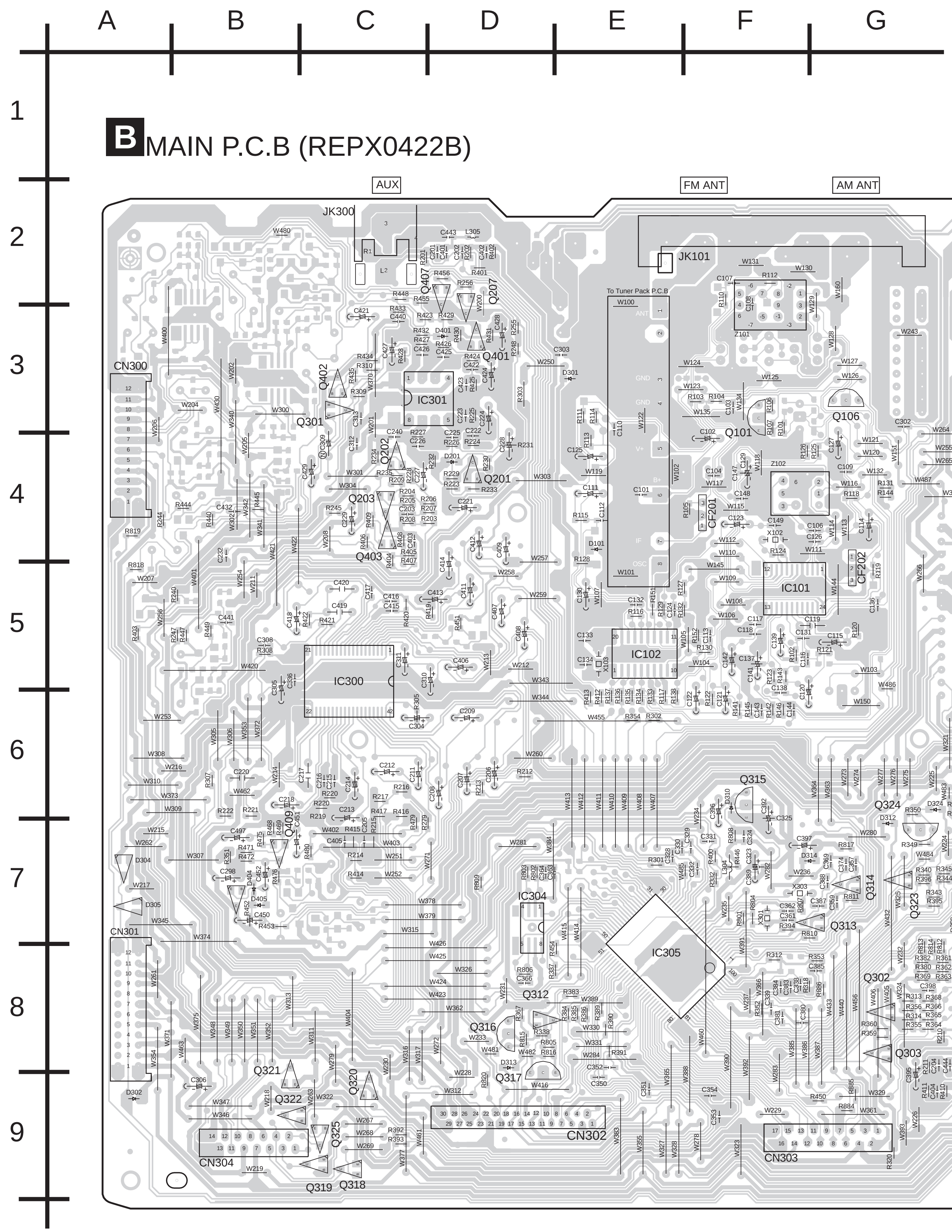
R1051
C1049
R1049
R1046
R1050
C1052
R1054
R1053
Q1014
Q1015
R1087
R1085
R1096
C1051
J1023
Q1021
R1092
R1093
R1047
R1048
R1061
R1091
R1095
R1094
Q1020
CN1001
PbF


PbF
J16
R952
J14
S951
MODE
S952
HALF
R953
IC951
J3
J13
D951
PL-
J6
J15
SOLENOID
PL+
CN971
S975
RECINH_F
J90
J160
R972
J140
S971
MODE
S972
HALF
R973
IC971
Z971
J130
D971
PL-
J60
J150
SOLENOID
PL+

B MAIN P.C.B (REPX0422B)



A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
AUX
FM ANT
AM ANT
JK300
JK101
To Tuner Pack P.C.B
CN300
CN301
CN302
CN303
CN304
IC300
IC301
IC304
IC305
IC101
IC102
CF201
CF202
Z101
Z102
Q101
Q106
Q201
Q202
Q203
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